

Commute Alternatives

A Transportation Manual Prepared By

MTC
Metropolitan Transportation Commission

COMMUTE ALTERNATIVES

A Manual for Transportation Coordinators

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MTC was created by the California State Legislature in 1970 to prepare a Regional Transportation Plan for the San Francisco Bay Area. The nine counties in this region are Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano and Sonoma.

Policy direction is provided by 18 Commissioners. Fourteen members are appointed directly by locally elected officials, two members represent other regional agencies (the Association of Bay Area Governments and the Bay Conservation & Development Commission), and two non-voting members represent state and federal transportation agencies.

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FOREWORD

The first edition of *Commute Alternatives: A Manual for Transportation Coordinators* was published by the Metropolitan Transportation Commission in January 1981. It has been used in several classes to train transportation coordinators throughout the San Francisco Bay Area. This, the second edition, is the first full revision of the training manual. Information throughout the manual has been updated, and a new chapter on Contingency Plans has been added.

The range of published material on commute alternatives is virtually limitless. In preparing this document, our objective was to produce material that could be used on a daily basis by transportation coordinators. The latest thinking and research has been summarized in the text, and a step-by-step guide to getting started is included. Should the coordinator require more in-depth material, an up-to-date bibliography and list of people to contact are also included in each chapter. Transportation coordinators who have used the manual report that the list of local contact people is invaluable to new coordinators.

The manual has seven main chapters; they are designed to stand alone, if necessary:

- Ridesharing
- Transit
- Cycling and Walking
- Alternative Work Hours
- Parking Management
- Administration
- Contingency Plans

The first five chapters begin with a summary of the particular alternative under discussion and a brief overview of similar programs that have been implemented elsewhere (success stories). The summary and examples are printed on cream colored paper. The detailed descriptive text includes the "pros and cons" of each proposal and provides guidelines for implementing the proposal. At the end of each chapter are a list of references and contacts and an Appendix which includes sample materials from existing programs.

The Administration Chapter is the basic guide for the transportation coordinator: It describes how to tailor a program of commute alternatives for his/her company, how to market the program to employees and, most importantly, how to maintain the momentum of the program. This chapter includes information on government tax incentives available to employers and employees and other recent state legislation relevant to commute alternatives.

The Contingency Plans Chapter provides information on federal, state and local government energy contingency plans and discusses preparations that the transportation coordinator may make for fuel shortages and other emergencies.

A supplement to the manual, *Commute Alternatives: Carpool Handbook*, is available from MTC. During 1983, two additional supplements will be produced — on driver efficiency programs and small employer programs. Coordinators will be sent information on the supplements when they become available.

The manual serves as the basic text for coordinator training classes conducted by MTC. Updated lists of people to contact and examples of company programs will be provided to manual holders periodically. Current information is also provided through the Commute Alternatives Program newsletter, *Coordinator Connection*. If your company would like more information on the Commute Alternatives Program, please give us a call (415) 849-3223, ext. 63 or 33; ask for Shanna O'Hare or Susan Bachman. We are here to help you.



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We have entered an era of scarce fiscal, energy, and transportation resources. Commute alternatives programs are helping to solve these problems.

INTRODUCTION

This manual has been published expressly for Bay Area employers who are committed to improving the daily home-to-work commute for their employees. We hope that such companies will nominate a "transportation coordinator" who, by using this manual, will promote the alternatives to those commuting alone.

During the past decade, it has become obvious that it is neither desirable nor financially feasible to continue to accommodate increasing numbers of commuters in single-occupant automobiles. As our highways become more congested, it becomes very difficult to develop near employment centers. The threat of recurrent petroleum shortages looms constantly in the background. Construction and maintenance costs for transportation facilities have escalated much more rapidly than the overall rate of inflation. Moreover, there is increasing public sentiment that there simply must be a better way to get back and forth to work.

We believe that there is a better way. This manual is intended to assist employers in encouraging *more* employees to ride in *fewer* vehicles. Public transit is one solution. Older, eastern cities and metropolitan areas in Europe have demonstrated that mass transportation can work effectively. In the Bay Area, we have strong regional transit systems which can be used by more commuters. This manual describes how to make transit a more attractive alternative for employees. Another solution is to use the existing highway system more efficiently by encouraging employees to ride to work together. Carpools, vanpools and buspools reduce congestion, reduce commuting costs and eliminate the need for ever-expanding parking facilities.

At the Metropolitan Transportation Commission, we have been grappling with these problems for the past decade. Our experience, which is supported by evidence from across the country, is that strong involvement on the employer's part is often necessary to create a climate wherein alternatives to the automobile can flourish. Hence, this manual. We hope that it provides assistance to the private sector in promoting ridesharing and other alternatives. While in the past, management may have thought it unnecessary to delve into commuter problems, we believe that the potential benefits to employer and employee alike are so great that company-sponsored commute alternatives programs should not be overlooked.

WHAT ARE THE BENEFITS OF A COMMUTE ALTERNATIVES PROGRAM?

1. **It makes good economic sense.** Gasoline prices will continue to escalate, serving to further increase the costs of travel in general and commuting in particular. Transportation costs now constitute the third largest expense in the average family's budget, taking 10-12 percent of total income. Transit and ridesharing are two obvious ways to radically alter daily commute costs. For the employer, a commute alternatives program can help contain the cost of providing and maintaining parking spaces.

2. **Retaining and recruiting employees.** Housing construction in the San Francisco Bay Area has not kept pace with the expansion of business and industry. Increased

housing costs have also contributed to a situation in which many people live far away from their place of work and commute long distances. An effective commute alternatives program can broaden a company's labor market and serve as a recruitment device. As commute costs and distances increase, potential employees find effective commute alternatives programs to be worthwhile fringe benefits. Many companies offer commute assistance as a means of retaining employees when a company relocates.

3. The uncertain energy situation. Although gasoline supplies now appear stable, threats of shortages or major cost increases are always on the horizon. The 1970s witnessed two major gasoline shortages; as world demand intensifies, other crises will inevitably develop. An effective commute alternatives program can help ensure that, in times of gasoline scarcity, employees will get to work with a minimum of inconvenience. Conservation efforts will also reduce the vulnerability of the United States to fluctuating oil supplies.

4. Air quality considerations. Another benefit is improved air quality. At present, the EPA 1987 deadline to meet clean air standards can only be met if hydrocarbons and carbon monoxide pollutants are reduced. A variety of measures have been adopted in order to achieve this goal, such as the recent legislation requiring biennial vehicle inspections. However, it is clear that a reduction in vehicular travel would contribute to cleaner air. This is true particularly for carbon monoxide (CO), which is produced primarily by motor vehicles.

If steady progress toward meeting the standards in 1987 is not maintained, the U.S. Environmental Protection Agency (EPA) can impose a number of sanctions on the Bay Area. These include a freeze on new industrial sources of emissions, and a cutoff of federal funds for certain types of highway and sewage facilities.

5. Continued restrictions on growth. Due to inflation, budgetary restraints, and space restrictions, streets, highways and parking facilities cannot be constructed to the extent that they were in the past. Peak-period congestion has become a way of life in many parts of the Bay Area. Many companies cannot be expanded, since an increase in the number of employees implies expansion of roads and parking facilities. Furthermore, organizations whose employees park in nearby neighborhoods are under increasing pressure to reduce automobile traffic.

An effective commute alternatives program can reduce these pressures by making the most efficient use of existing transportation investments: the highway and transit systems, and parking facilities.

THE TRANSPORTATION COORDINATOR

A company that sets up a commute alternatives program appoints a "transportation coordinator" whose job it is to plan and implement the program. Often the transportation coordinator is a professional staff member from the personnel or administration department; in some cases, the company hires someone especially to serve as the transportation coordinator. (In some cases, this position is referred to as a "commute coordinator" or "transportation broker.")

There is a wide variation in typical time commitments to the job. It can be a half-time position, or in some companies, can require a three-person staff working full-time. Some companies assign one person to plan and initiate the program and someone else to maintain it once it is operational.

It is important that management do more than just appoint a transportation coordinator. In order to assure the program's success, management must be willing to show that it backs the program. One way is to approve a company policy supporting alternative transportation. To make management support more visible, chief executive officers can circulate memos about ridesharing or can make appearances at transportation fairs. Coordinators can work more effectively if given the authority to distribute information

through the interoffice mail system and if they are allowed access to employee residence information. Management support is key to building a successful commute alternatives program.

SUCCESS STORIES

Many companies both in the Bay Area and throughout the country have already embarked on commute alternatives programs. These companies realize the following benefits: reduced costs for parking facilities, less employee absenteeism and tardiness, better relations with the surrounding community, a better public image, a broader labor market and a recruitment benefit to offer employees. In order to demonstrate what can be achieved, we have included the following summary of ongoing programs in the Bay Area. (For more information on these programs, refer to the Contacts list at the back of the Administration Chapter.)

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory has one of the most sophisticated and successful commute alternatives programs in the Bay Area. The two-person Laboratory Transportation Coordination (LabTrans) Office provides a wide variety of services. As a result, 60 percent of the 7,200 employees at this suburban facility get to work by some mode other than the single-occupant car.

The LabTrans Office performs in-house coordination and registration of the overall ridesharing program. There are 53 vanpools functioning, with an average ridership of 13 people per van. The vans park in preferential locations and are allowed to drive through areas that are normally closed to automobile traffic. There are 850 carpools registered, carrying 2,080 passengers. Carpools also receive close-in preferential parking.

There are several transit systems serving the facility. Sierra Lines, an employee-developed transit line, has four express buses used by 170 employees. The city of Livermore also provides bus service. AC Transit provides express bus service for 250 employees from BART to the Lab using its special BART feeder buses.

From 500 to 600 employees bicycle to work every day, with the total reaching 800 in the summer. Both the Lab and the city of Livermore have extensive bike lanes and trails, and an employee bike club holds noontime races. The Lab provides showers for bikers; it also provides 900 bicycles to use within the facility. There is a bicycle repair crew that services the bikes and moves them around the facility.

The program provides no subsidies to commuters who use alternative transportation. The coordinators work closely with the personnel and housing departments, and provide a great deal of help to new employees seeking to locate near transit or ridesharing routes. Vanpools continue to be the biggest growth area in the program.

Hewlett-Packard, Palo Alto

This Peninsula-based manufacturer has an extensive commute alternatives program. Each of the nine Hewlett-Packard sites in Palo Alto has an on-site transportation coordinator who provides information to fellow employees on vanpooling, carpooling, transit and bicycle use. Similar services are offered at Hewlett-Packard sites in Santa Clara, Mountain View, Cupertino, San Jose and Sunnyvale. A 1979 survey of the 6,000 employees at the Palo Alto facilities showed 36 percent were already using alternatives to driving alone to work. The new Hewlett-Packard corporate offices include 90 bicycle lockers and 90 racks as well as shower facilities.

The company has also expended resources on commute programs outside its facilities. Hewlett-Packard donated a HP3000 computer to RIDES for Bay Area Commuters, the regional rideshare organization. This enabled RIDES to offer instant carpool

and vanpool matching to callers. Hewlett-Packard has also contributed to shuttle bus connections between the Stanford Industrial Park and the Southern Pacific railroad station, and to construction of bicycle lanes in the city of Palo Alto. Hewlett-Packard also loaned an executive for one year to the city of Sunnyvale to assist with energy and transportation programs, and contributes a personnel director's time to the RIDES Board of Directors.

Hewlett-Packard was also the first company in the United States to adopt flexible work hours. Scheduling flexibility is an important ingredient in the formation of carpools, and the Santa Clara County Transit District reports that flexible hours have spread work arrivals in a fashion that improves bus productivity. A survey of employees in the Stanford Industrial Park showed a pattern of steady work arrivals from 6:30 a.m. to 9:00 a.m. — an unusually "flat" distribution of arrivals that smooths traffic flow and permits efficient bus scheduling.

University of California, San Francisco

The University of California, San Francisco, is a university medical research center located in a congested residential area of San Francisco. A number of years ago, strong neighborhood opposition to UCSF expansion plans culminated in several lawsuits and expressions of concern from the state Legislature. The University responded by initiating an aggressive commute alternatives program.

First, a transportation plan was developed by a transportation consultant, with input from the University and the neighborhood. Next, a five-person Transportation Office was set up to promote alternative transportation in a variety of ways. Today, new employees receive transportation packets containing a transit guide, other transportation information and a letter from the Chancellor urging employees not to drive alone. Transportation Office staff explain the transportation program at new employee orientations and work at the visitor center for portions of the day. There are transportation fairs, contests and regular articles in the employee newsletter. Currently 30 University-owned vanpools and six club buses are operating.

This program has reduced UCSF-generated traffic by 8 percent, despite expanded employment. Less than one-third of the 10,000 people on campus every day drive alone to UCSF. The program has also served as a model for the 14 members of the Joint Institutional Transportation Brokers Association, made up of representatives from hospitals, universities and private employers concerned with employee transportation in San Francisco.

Fireman's Fund Insurance Co., San Francisco and Marin

When Fireman's Fund Insurance Co. moved 700 of its home office workers from San Francisco to San Rafael in Marin County seven years ago, the company assumed a commitment to assist its workers with their new commute. Originally, the company provided three subsidized express buses from San Francisco to the new facility. This program has since been concluded and partially replaced with a vanpool/carpool program.

The program is now available to 3,800 employees in San Francisco and Marin counties. Fireman's Fund provides the vans on a break-even basis; all costs are figured in the fares (including insurance premiums). There are 29 vans in operation, 20 to the Marin site and nine to San Francisco. There is one employee-owned van operating to Marin. In addition, company employees operate two buspools to San Francisco through Golden Gate Transit; there are about 100 active carpools at each site; bike racks are provided; and preferential parking is provided for both carpools and vanpools in San Francisco and for vanpools in San Rafael. Transit stops are located directly adjacent to the main Marin and San Francisco facilities.

Fireman's Fund has also adopted staggered work hours. Over half the company's employees are on the job by 7:30 a.m. — half an hour before the worst of the rush-hour crush. In spite of relatively poor transit connections to the home office location, only 42 percent of the employees drive to work alone.

In October 1982, another relocation to Marin County from San Francisco occurred. Approximately 1,100 employees moved from the main San Francisco site to a new building in Novato. The vanpooling, carpooling and buspooling services developed over the last several years have provided a sound foundation for aiding employees affected by the relocation. The commute programs may be partially responsible for the low number of employees leaving the company due to the move. Preferred parking is provided at the Novato facility for carpools and vanpools. It is expected that the vanpool program will expand by 10-15 vans.

Children's Hospital, San Francisco

In 1978, Children's Hospital was faced with the task of requesting approval for a \$40 million modernization program from the city Planning Commission. Neighborhood groups in the area of the hospital were extremely concerned about the 390 employees who parked on city streets in their residential neighborhoods.

Children's responded by developing a transportation plan in conjunction with a consultant and hiring a transportation coordinator. The coordinator implemented a broad transportation program. The sale of Municipal Railway Fast Passes was begun, and the use of transit promoted. A carpool program was initiated, and free parking in the hospital garage designated for the pools. Single-occupant autos pay \$30 monthly. There are now 46 registered carpools (including three flexible large carpools of 11-16 nursing personnel each) and three vanpools, plus employee ridesharing (in carpools, vanpools and buspools) with adjacent institutions and employers. The hospital has also introduced a shuttle service for employees in the southeast section of the city, who previously had an arduous transit trip with several transfers.

The neighborhood requested, and the city implemented, neighborhood permit parking in the area. This, combined with the ridesharing and transit programs, has reduced the share of the 1,375 employees who drive alone from 57 percent in 1978 to 41 percent in 1980 (for the day shift). The number of employees parking on neighborhood streets has been lowered from 390 to 121. Children's is now reevaluating its plan to construct 45 additional parking spaces at a cost of \$800,000.

Chevron, Concord

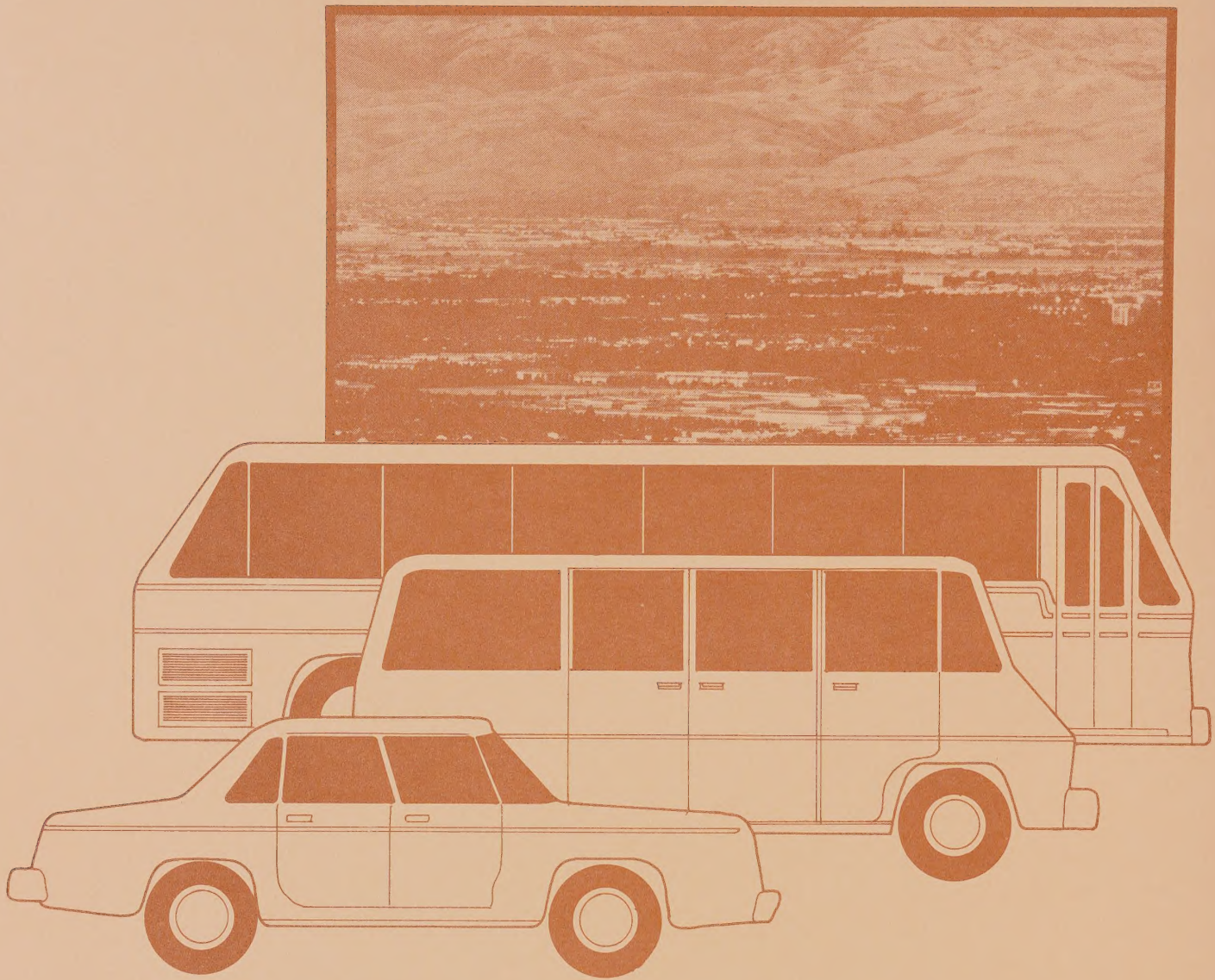
The Chevron site in Concord has five buildings and 2,000 employees. Sixty-four registered carpools (of three or more people) receive close-in preferential parking. There are other carpools which are not registered, as they arrive early enough in the day to get a good space. There are also three privately-owned vanpools. Matching is done through the RIDES computer or by a hand-match within the company.

Chevron also operates a shuttle between the Concord BART station and its Diamond Boulevard site. There are seven runs between 6:25 a.m. and 8:15 a.m., and eight runs between 3:35 p.m. and 5:30 p.m. Approximately 100 employees a day use the shuttle. The site is also served by several different bus lines which are publicized through Chevron's newsletter and new employee packets. In addition, there are three different parking areas with outside stands for bicycles and motorcycles. During the work day, Chevron runs a company-owned van on 11 round-trips a day between its Concord, Walnut Creek and San Francisco sites. Managers use the van when they need to visit another site, cutting down on the need to use company or personal cars. Finally, Chevron's commute program includes staggered work hours, with most employees arriving between 7:00 a.m. and 8:00 a.m. Employees may vary their assigned hours by as much as 30 minutes.

ROLM Corporation, Santa Clara

ROLM corporation has a full-time transportation coordinator. There are about 380 registered carpools of two or more people, all hand-matched within the company. Carpools receive an assigned close-in parking space. A computer match program developed by the County Transit District which uses company personnel data is being pioneered at ROLM. This program enables the coordinator to match all employees and market carpools or vanpools to potential rideshare groups. ROLM has 30 bicycle lockers and shower facilities available, and a company bicycle club meets once a month. Transit tickets are sold on site; ROLM will be one of the pilot companies to sell Caltrain tickets and joint train-transit passes as well. Employees who buy three bus passes get one free. There are also on-site displays of transit schedules, maps and bicycle routes. Over 70 percent of the work force has the option of flex-time.

The program is bolstered by a "Transportation Task Force" of 12-15 selected employees which meets periodically to advise the coordinator. Every six months there is a drawing for the cash equivalent of ROLM's current stock value. To qualify, employees must "creatively commute" three out of five days a week.



Ridesharing is the key element of your commute alternatives program.

CHAPTER 1

RIDESHARING

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SUMMARY AND DEFINITION

Ridesharing refers to the sharing of one vehicle by a number of commuters. While ridesharing also includes increased utilization of public transit and shuttle services, this section focuses on employer or employee-provided ridesharing programs such as carpools, vanpools and buspools. These programs have the advantage of being less capital intensive and they can be started more quickly than public transit since they utilize, to a great degree, an already existing vehicle fleet. Ridesharing either by carpooling, vanpooling or buspooling is the key element of an employee transportation program.

In the San Francisco Bay Area, complete ridesharing assistance services are provided by RIDES for Bay Area Commuters, Inc., a non-profit public and privately supported organization. Several local ridesharing organizations cooperate with RIDES to provide promotional and special services in their areas. Details of the services available free of charge to coordinators are included in the following sections.

Carpooling

Carpooling involves the use of an employee's private vehicle to carry one to five fellow employees to work, either using one car and sharing expenses, or rotating vehicle use so that no money changes hands. A variation of carpooling is the use of company fleet vehicles at night, with one employee taking the vehicle home and providing rides for other workers. Carpool groups might also consider using leased vehicles. Commuters sometimes form carpools to get to a BART or Southern Pacific station or an express bus park-and-ride lot for long distance trips. Companies can help employees start carpooling by utilizing the matching and promotional services of RIDES for Bay Area Commuters, Inc. and/or local ridesharing organizations or they can develop their own in-house carpool matching program.

Vanpooling

Vanpooling generally involves the use of an eight-to-15 passenger van, with driving done by one of the employees, and the fixed and operating costs at least partially paid by the other riders through monthly fares.

Vanpool programs may be company-sponsored. For example, the first vanpool program was started by 3M of St. Paul, Minnesota. 3M owns and maintains the vans; employees pay the fares, with 3M providing incentives such as free parking in heated garages.

For those companies unable or unwilling to take on the financial and administrative burden of providing vans, "third-party" programs, such as RIDES, provide the vans as well as matching and support services. These services are provided at no cost; the vanpoolers pay a monthly fare (usually one-third to one-half of the cost of driving alone) calculated to cover fixed and operating costs. The driver rides free.

A common variation is the privately owned vanpool. Here an employee purchases his or her own van, arranges insurance and, for a fee designed to cover fixed and operating costs, provides daily commute service for fellow employees. Most companies that provide incentives for ridesharing will extend those incentives to the private vanpool.

A combination of the third-party and the privately owned program is the vanpool “seeding” or “transition” concept, used by the Golden Gate Ridesharing Division in the North Bay counties since 1977. This program uses a small vanpool fleet owned by Golden Gate to introduce commuters to vanpooling. After a trial period of six months to a year, commuters are encouraged to purchase or lease vans themselves or transfer to a RIDES van. The Golden Gate vans are then turned over to a new group. The Golden Gate program can be used to start groups that will move to company-owned vans in six months. Or company sponsored programs may be modeled after the Golden Gate program with the company purchasing or leasing a few vans to get vanpool groups started.

Buspooling

Buspooling at its simplest is the use of public transit for the commute trip (refer to the Transit Chapter). Another type of buspool (sometimes called subscription or club bus), utilized when public transit is unavailable or inadequate, involves the use of buses owned privately by a charter bus company or an employee. An employee, the employer or an organization such as RIDES or Golden Gate acts as a coordinator between a group of employees and the bus owner. Riders generally pay a fixed monthly fare and receive express service. For employers, promotion of this type of buspooling can be similar to promotion of vanpools.

Benefits

Ridesharing can reduce commute costs, energy consumption per passenger, highway congestion, parking space demand and air pollution. By encouraging employees to rideshare, the company can benefit in terms of better employee morale, reduced absenteeism and tardiness, a potentially expanded labor market, lower capital costs for employee parking and an improved public image. Ridesharing programs can also help a company retain employees when a plant relocation has to be made.

The most visible cost saving for the employer is a reduced need for parking spaces. For each vanpool formed, a company can remove at least six vehicles from its parking facility. For each three-person carpool formed, a reduction of two spaces can be realized. Each vanpool can save a company up to \$21,000 in new parking space costs; each carpool, \$7,000.

State tax benefits are also provided to employers who provide ridesharing programs (see the Administration Chapter and Table 21).

Cost savings are also the most persuasive argument for selling ridesharing to commuters. With the typical Bay Area vanpool commute of 70 miles round-trip, 13 passengers in a RIDES vanpool would each pay \$60 a month; driving alone in a subcompact car on that same commute would cost each person \$300 a month. In one year, the vanpool rider on the 70-mile round-trip commute can count on a \$2,900 savings. Better yet, if the employee volunteers to be the vanpool driver, commute costs drop to zero — or a savings of more than \$3,600 a year — since the driver rides free. The following table gives other examples of the cost savings enjoyed by those people who share a ride.

TABLE 1
MONTHLY COMMUTE COSTS*

Daily Commute Miles	Driving Alone	3-person Carpool	Vanpool** (13 riders)	Vanpool Driver
30	\$165	\$ 55	\$45	\$0
50	\$231	\$ 77	\$52	0
70	\$300	\$100	\$60	0
90	\$366	\$122	\$67	0

*Cost of owning and operating a subcompact car in 1982, cost of gasoline \$1.40/gallon. Source: California State Automobile Association.

**RIDES' vanpool fares as of October 1, 1982.

Another way of looking at cost savings is by comparing increases in costs for each type of commuting as gas prices rise, as RIDES has done in Table 2.

TABLE 2
ADDITIONAL COST OF COMMUTING WITH INCREASE IN THE COST OF GAS

INCREASE IN THE COST OF GAS	ADDITIONAL COST Per Month, Per Person		
	1. 	2. 	3. 
.00/gal.	\$.00	\$.00	\$.00
.10/gal.	9.10	3.03	1.24
.20/gal.	18.20	6.06	2.48
.30/gal.	27.30	9.09	3.72
.40/gal.	36.40	12.12	4.96
.50/gal.	45.50	15.15	6.20

1. 1 PERSON in an intermediate size car, 65 miles round trip per day @ 15 M.P.G.

2. 3 PERSON CAR POOL, 65 miles round trip, intermediate size car @ 15 M.P.G.

3. RIDES VANPOOL, 11 paying riders, 65 miles round trip

A \$7 a month state income tax deduction is also available to commuters who rideshare; see Table 22 for more information.

Creating a Company Ridesharing Program

Perhaps the most important prerequisites for a successful ridesharing effort are a company policy supporting ridesharing and availability of an in-house transportation coordinator. The personal assistance a coordinator can provide is a strong inducement to ridesharing. Establishing a management level transportation committee and offering employee incentives are also important factors. (See the Administration Chapter for further details on creating in-house programs.)

Selecting Appropriate Strategies

Another important factor in a successful ridesharing effort is the match between the type of program and the market being served — the employees of the company. To design the program, the coordinator needs basic information about employee residence location and work hours. This information may be available from personnel records. If not, the coordinator can do a simple travel survey. A survey will also provide useful information on current commute modes and employee interests. (More information on surveys is included in the Administration Chapter.)

The crucial market characteristics in selecting appropriate ridesharing strategies follow. Table 19 in the Administration Chapter summarizes commute options based on an analysis of these factors.

Length of Employee Commute

Probably the most important factor in determining which ridesharing modes can be utilized is the length of employee commute trips. Short commute trips (less than 10-15 miles each way) are best served by carpooling; longer trips can be served by any of the programs, depending upon the number of employees, company location, shift times, etc.

Number of Employees

The number of employees will affect the type of program that will be most effective, particularly if an in-house matching program is used. A small company (500 or less) will usually find that carpooling offers the most opportunities for the least cost, while very large companies (2,000 or more) will have a large enough market to utilize carpooling, vanpooling and buspooling.

Company Location and Number of Sites

Company location can determine the rideshare options that might work for employees. A small company (500 or fewer employees) located in a concentrated downtown area or in an industrial park could enlarge its ridesharing market by using RIDES' regional matching services. Nearby companies can provide potential matches and make vanpooling — or even buspooling — feasible ridesharing options. The number of company locations is another factor to consider. A company with employees scattered over numerous plant sites usually finds matching difficult, but can work with other companies in the neighborhood of each site.

Work Schedule

Usually the more shifts a company has, the lower the matching potential will be, meaning again that carpooling might be the most effective ridesharing mode. In working with other companies, a coordinator should always find out whether the companies' shift

times are compatible for matching. Unscheduled overtime is a deterrent to ridesharing unless the company provides backup transportation for employees.

Residential Concentrations

One other important market characteristic is employee residential concentrations. The closer employees live to one another, the easier it will be to obtain matches and to consider all aspects of ridesharing.

SUCCESS STORIES

Ridesharing does work. Examples of various ridesharing efforts in the Bay Area are highlighted below:

RIDES for Bay Area Commuters, Inc.

RIDES has started 455 third-party vanpools groups since April 1978. Since July 1981, RIDES has also helped 50 owner-operators start their vanpools. The total number of commuters placed in vanpools since 1978 is more than 6,000. Surveys indicate that 29,000 persons have been placed in carpools since 1973; 20,000 names are in the current data base for car and vanpool matching.

Golden Gate Bridge, Highway and Transportation District

Golden Gate Ridesharing Division has 35 vans available for groups on a six-month to a year trial basis and three back-up vans available to any vanpoolers in the North Bay; since the program began in 1977, some 250 groups have used the program, which allows commuters to try vanpooling before they make a long-term commitment. One hundred eighty of the groups have continued in privately-owned or leased vehicles, RIDES vans, or company vans. Through its transit division, Golden Gate also helps organize and subsidize buspools; 27 buspools are now in operation.

Bank of America, San Francisco

The Bank has 10,000 employees at the headquarters and the Data Center in San Francisco and utilizes a third-party car and vanpool program. Two hundred carpool groups have been formed at the Data Center and there are nine vanpools serving both locations.

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory has 7,200 employees in Livermore and a two-person "LabTrans" ridesharing office with its own computer matching capabilities. There are a total of 53 vanpools — 35 privately-owned, five privately-leased, 11 RIDES vans and one University of California van. There is also a backup van available to members of the Vanpoolers Association.

There are 840 carpools and four buspools. Only 40 percent of the workforce drives alone to work.

Children's Hospital, San Francisco

There are 1,375 employees on the day shift in San Francisco and a shared coordinator with Marshal Hale Hospital; 55 carpools and three vanpools were formed

over a two year period. There was a reduction of those who drive alone to work from 57 percent in 1978 to 41 percent in 1980 (on the day shift).

Lockheed Missiles and Space Co., Sunnyvale

Lockheed has 20,000 employees in Sunnyvale; a two-person ridesharing office with its own computer matching program; nine RIDES vans, 10 privately owned vans; 2,000 people in carpools; and six charter buses.

Fireman's Fund Insurance Co., Marin

There are 3,800 employees at three locations in Marin County; a three-person part-time ridesharing staff with an in-house computer matching program; and a company-owned vanpool fleet with 29 vans now operating (the first three vans started in May 1979). Buspools are also part of the program.

CARPOOLS

Carpooling has been with us, in an informal way, for many years. It is only in the past nine or 10 years that governmental or private organizations designed to help match commuters with other commuters going their way have been established. The purpose of this type of program has been to receive relevant information from applicants who wish to carpool, to search the "data bank" for other commuters with a similar commute, and to get the two together.

Because of the popularity of carpooling as a ridesharing method among company coordinators, MTC produced a separate document called the *Carpool Handbook*. Coordinators often start their ridesharing program emphasizing carpooling; this handbook can provide more detailed guidance (see the Reference section).

RIDESHARING ASSISTANCE ORGANIZATIONS

RIDES for Bay Area Commuters, Inc.

In the Bay Area, Caltrans started a computerized carpool program in 1973 during the first gas "crisis." This program has since been incorporated as a division of RIDES for Bay Area Commuters, Inc., a non-profit, publicly and privately funded organization whose purpose is to promote ridesharing throughout the nine-county Bay Area and Santa Cruz. RIDES also operates a vanpool program (see the Vanpools section) which is integrated with the carpool program.

The basic element of the carpool program is the free carpool matching service. By calling any of the carpool numbers, which are displayed on the highway — (415) 861-POOL, (408) 429-POOL or (707) 447-POOL — and giving name, address, phone number and commute information to the RIDES representative, the interested caller receives names — over the phone — of individuals in the data base with similar commutes. A computer printout listing the best potential matches is sent to the applicant, usually within three working days, along with other information on carpooling or vanpooling (see the Appendix for a sample printout).

This program can be presented at a company site during a ridesharing campaign or transportation day through distribution of RIDES application forms. (Some companies print the RIDES form with the company logo, signifying official backing of the campaign.) Matching possibilities will be increased if employees from neighboring companies are invited to participate in the campaign. The RIDES brochure gives a brief summary of the savings available by carpooling (and vanpooling) and includes an application for the ride-matching program. Applications are collected by the coordinator and turned over to RIDES, which enters the applications into its computer data base and mails out the individual match lists. RIDES can also provide the coordinator with a printout that lists all company applicants, with the relevant commute information. These employer reports include a breakdown of applicants' travel habits, geographic clusters of residences, and how far the applicants live from the work site. This listing enables the coordinator to identify and actively work with potential carpool groups. RIDES also provides the coordinator with marketing materials, including posters and a slide show, and offers free consulting services. A full ridesharing campaign should be repeated regularly (perhaps semiannually) to achieve the best results.

Another feature of the RIDES program is an emergency carpool matching program. Applicants may indicate that they are interested in carpooling in an “emergency” only. (See the Contingency Plans Chapter for more information on this feature.) RIDES has found this service is ideal to encourage “occasional” ridesharing and is an important first step in getting employees involved.

The Coordinator’s Role

When RIDES performs a rideshare campaign, the company coordinator is important in organizing campaign publicity, distributing and collecting the ridesharing applications, providing personal follow-up after the campaign, encouraging employees to call the people on their match lists, and arranging informal meetings between potential carpoolers. Once carpools are formed, the coordinator, working in conjunction with RIDES, can search the data base for potential carpoolers when a vacancy occurs and can also aid RIDES in keeping the data bank current. This is especially important in keeping the data base effective. An important part of the coordinator’s job is informing new employees of the carpooling option, since a job change is a very good opportunity to also change commute modes before habits are set. The coordinator should keep in mind the need to offer an incentive like preferred parking for carpools (refer to the Parking Management Chapter), and should inform carpoolers of park-and-ride lots available to them near the residential end of their trips.

Other Carpooling Services

Although RIDES is the primary ridesharing assistance organization in the Bay Area, several other agencies offer assistance in local areas using RIDES’ data base and ride-matching program. The Santa Clara County Transit District (SCCTD) established its own carpool program as a part of a comprehensive Commuter Transportation Program. SCCTD offers personalized telephone matching (with applications and match lists processed by RIDES) to employees in Santa Clara County. The District has worked extensively with the Santa Clara County Manufacturers’ Group to help solve transportation problems encountered by employees. Golden Gate Ridesharing Division offers carpooling services along with vanpooling services in the North Bay counties. Berkeley TRiP, Solano Rideshare, Sonoma County Ridesharing and Santa Cruz Share-A-Ride also have RIDES computer terminals in their offices and provide ridesharing services. Phone numbers for all of these organizations are included in the Contacts section at the end of this chapter.

It should be noted that all of these programs offer very personalized service — instant matching on the phone, quick turnaround on match lists and help in solving problems. All these services are provided at no cost to the employee or the employer. The data banks are updated every three to six months in order to ensure that names and commute information are as current as possible. The organizations all offer promotional materials such as brochures and posters, as well as applications which can be personalized with the company name and logo. Ridesharing organization staff will also help coordinators design a ridesharing campaign or transportation day. To begin a ridesharing organization-assisted program or to obtain advice in setting up your own program, simply call RIDES or one of the local organizations listed in the Appendix.

Brokered Carpool Program

Beginning in fall of 1982, Golden Gate Ridesharing will sponsor a third-party, brokered carpool program for commuters traveling to or from the North Bay counties (Marin, Sonoma, Napa) served by the Golden Gate Bridge, Highway and Transportation District. This program is part of a two-year federally funded demonstration project. The brokered carpool program is similar to the Golden Gate Vanpool Program. Golden Gate will assist in forming and placing carpool groups in automobiles leased by the District,

for a trial period not to exceed six months. At the end of the trial period, the carpool group may take over the vehicle lease from Golden Gate, buy or lease another vehicle to be used primarily for commuting, or act as a "traditional" carpool using the personal vehicles of carpool members. For more information, contact Golden Gate Ridesharing Division.

Golden Gate Corridor Flex-Pool Program

Golden Gate Ridesharing Division provides a back-up vanpool service for ridesharers who occasionally miss their regular ride home from work. Called "Flex-Pool," the program provides evening service from San Francisco to Marin and Sonoma counties leaving between 6 and 7 p.m. each weekday evening. Riders pay a per-trip fee to use the back-up service, based on distance traveled.

Many potential ridesharers remain in single-occupant vehicles because they fear being stranded when late work, personal errands or other circumstances prevent their scheduled commute trips. The Flex-Pool program is a demonstration project, funded by the Urban Mass Transportation Administration, to test whether the availability of a back-up ridesharing system alleviates this concern and encourages participation in carpools, vanpools and buspools. For more information call Golden Gate Ridesharing Division (see Contacts).

Park-and-Ride Lots

Caltrans provides an incentive to ridesharing in the form of free park-and-ride lots throughout the Bay Area. These lots provide easily accessible locations for carpools to meet and leave cars not used for the commute trip. RIDES coordinates all information on park-and-ride lots in the Bay Area and sends lists of these locations with each match list. Additional copies may be obtained by calling RIDES.

BART Pool Program

BART also offers preferential parking for carpools at some of its parking lots. RIDES helps arrange carpools for the trip to the BART station. BART issues each commuter an I.D. card, and three such cards, displayed in the windshield of any vehicle, qualifies the vehicle for preferred parking at the BART station. Call RIDES or BART for more information on the BART Pool Program.

Confidentiality

Every applicant to the RIDES system, both individual callers and company-sponsored campaign applicants, are guaranteed complete privacy and confidentiality. Their home address will not appear on the match list or even on the employer reports. All employers participating with RIDES must agree to respect this condition and not use or sell the employer reports for any other purpose. Each company coordinator receives only the names of that company's employees on the employer report even when RIDES has coordinated joint campaigns of a number of employers in an area.

IN-HOUSE PROGRAMS

As mentioned previously, some companies may choose to develop their own carpool program. They may feel that their employees would rather be matched with fellow workers than participate in a regional data base, or they may want to work intensively with their employees and want to give a company identity to the carpooling effort. Companies may also work cooperatively with other nearby companies on a joint

carpooling program. Companies with in-house carpool matching programs often use RIDES' services as a back-up for hard-to-match cases.

The company's role in this instance would be similar to the ridesharing assistance organization's role — helping to get employees with similar commutes to meet each other and start a carpool. The company would also have to develop a data storage/retrieval system and a method of employee matching.

Data Base and Matching System

In developing a data base and matching system, the following factors are critical:

- Sufficient commute information must be obtained; the RIDES and Golden Gate applications give an indication of the data usually required. (See the Appendix.)
- The zonal boundaries for matching at the home end must be small enough to give adequate information for matching purposes. For instance, at Lawrence Livermore Laboratory, zip codes won't work for the major employee residential areas because one zip code covers two communities split by a freeway; a reasonable pick-up is impossible, even though four persons may live in this zone and have the same shift.
- The system input must reflect any peculiarities of the work force — multiple shifts, rotating shifts, multiple work sites, etc.
- Home addresses should be kept confidential.

It is recommended that the coordinator start with a manual matching system. This type of system utilizes a card index or an application file system (categorized by residential location) enabling the coordinator to search for a match from the home-end information presented by an employee interested in carpooling. The coordinator can use the RIDES or Golden Gate applications as guides in determining what information should be obtained, and might want to add spaces for data such as date application is received, whether a carpool was formed or a match list provided, etc.

It would be especially important to duplicate the RIDES application if employees are to be given the option of having their information forwarded to the regional RIDES program to give them more complete matching possibilities. RIDES will help you design your in-house matching application to ensure compatibility.

Depending upon the size of the company and the number of ridesharing options being offered, a coordinator may want to investigate the feasibility of a computer matching program. *A word of caution:* a computer match program can be costly and time consuming to set up and should be considered only if the information handling and matching is totally beyond the staff time available, if the company does not wish to use RIDES' free matching services, and if the program is successful enough to warrant such an expense. It is generally helpful to start with a manual matching program because this aids the coordinator in understanding the needs to be served by the computer program.

Lawrence Livermore National Laboratory Program

Two examples of companies with computer programs are Fireman's Fund and Lawrence Livermore National Laboratory. The Lab uses a computer time-share system to keep track of its data and to aid in matching. They contract with a computer time-share corporation, paying a monthly lease cost, which includes a terminal used in the LabTrans Office. In addition to carpool matching, the staff uses the computer to perform other carpool related functions which would be cumbersome by hand (such as providing an up-to-date listing of all carpools, current or forming).

Fireman's Fund Program

Fireman's started with a manual matching system and was able to move to a computer system when an employee member of their Community Committee volunteered to write the matching program, thereby saving costs. Fireman's program utilizes the company's own computers. The program uses home-end zip codes (rather than home addresses) and work hours to match riders (refer to the Appendix for the application). The computer produces a match list with: 1) names; 2) departments; 3) business phones; 4) preferences for driving or riding; and 5) commute information. This match list is provided to the interested applicant; it is up to the applicant to form the carpool group, although the coordinator will provide help if necessary.

Fireman's program can be accessed by employee I.D. number (useful when there are duplicate names or to aid in changing any commute information in the computer), alphabetized name or zip code — a feature which aids in updating and matching names.

Available Computer Programs

There is a computer carpool matching program (software) available at no charge from the Federal Highway Administration. The program works on a grid/square system, matching by home and work location and by work start and end times. It will "search" for matches within a ring (grid) around either the origin or destination, and can sort by applicant I.D. number, company or division. The program does not provide an immediate response. For more detailed information, call the Rideshare Hotline listed in the Contacts section and ask for an overview booklet on the FHWA Carpool Matching Program.

Documentation on RIDES' and Lawrence Livermore National Laboratory's programs is also available. (See the References section.) These programs may be adaptable to your company's needs.

Finally, a few private consultants are developing microcomputer ridematching software packages to be available at low cost. These may also include the capability of providing transit information. Contact RIDES' Director of Operations for advice and contacts for these programs.

Personalized Attention

There are a number of techniques and tools available to implement an in-house carpool matching program, but what is most important is the *personalized, one-on-one attention* given to the ridesharing effort by the coordinator. It doesn't work just to install a "system," be it a card file or the latest computer; what counts is the coordinator's work in informing employees of the opportunities available and encouraging carpool formation by whatever means are available. The program doesn't stop with the matching system; the coordinator's responsibilities include surveys, promotion, matching, follow-up, data base update and individual problem solving.

Table 3 summarizes the basic steps of a carpooling campaign whether a ridesharing assistance organization program or an in-house system is used.

TABLE 3
CARPOOLING PROCEDURES

- **Use the RIDES application form** from RIDES or your local ridesharing agency or design and have printed a company form.
- **If not utilizing** the RIDES program for matching, design a matching system (see *Carpool Handbook* for details).
- **Set a date** for the campaign and develop or use RIDES marketing materials (newsletter articles, posters, flyers).
- **Distribute or post** marketing materials well in advance of campaign dates.
- **During the campaign**, distribute applications, present slide shows and speakers, answer questions.
- **Involve employees** from neighboring companies, if possible.
- **Collect applications** and develop match lists, identifying potential carpools.
- **Distribute match lists** and help groups to get carpools started.
- **Follow up** (update applicant information, answer questions, solve problems, publicize new carpool groups, conduct another campaign, etc.).

VANPOOLS

There are three types of vanpools: third-party, company-sponsored, and owner-operated. In third-party programs, a ridesharing organization, or some other agency such as the state department of transportation or a van leasing company, offers a vanpool service. The third-party administers the vanpool program and takes on the financial liability. In company-sponsored programs, the company owns or leases vans and administers the program. Owner-operated vans are the sole responsibility of the owner/driver. Owner-operated vanpools can be encouraged and facilitated by employers. An employer needs to determine which type of program to implement; combinations of the three programs are also possible.

THIRD-PARTY

Third-party vanpool programs have become increasingly popular across the country because they relieve the employer of the legal and financial risks involved in setting up a vanpool program, and also provide administrative, matching and problem solving services at no cost to the employee or the employer. In effect, the third-party organization acts as a consultant and a broker for employers and employees who wish to utilize vanpools to commute. A third-party organization also acts as an advocate for ridesharing groups, obtaining reduced rate parking, priority access to fuel supplies, etc.

Major Programs

There are two major third-party vanpool programs in the Bay Area. The regional program is offered by RIDES for Bay Area Commuters. RIDES will give a luxury van to groups of 10-15 people to use for their commute. The driver has a free commute and the passengers pay a fare of approximately 4 cents per mile which covers all the fixed and operating costs. Once formed, the vanpool can continue indefinitely.

The other major third-party vanpool program is sponsored by the Golden Gate Bridge, Highway, and Transportation District Ridesharing Division, serving Marin, Napa and Sonoma counties. It is a vanpool seeding and transition program which involves forming and placing a group in a vanpool for six months to a year, and at the end of this period, helping the group to buy or lease its own van or transfer into a RIDES or company-sponsored van. This seeding program has proved to be highly successful in building long-term vanpooling arrangements. Out of 250 such groups, 180 are still operating.

The elements of the two major programs are given below. Although the fare structures of the two programs are different, the major program components are similar.

- Commuters interested in driving or riding in a vanpool indicate this interest on a RIDES or Golden Gate matching application. Using the same computer matching program that is used to match carpoolers, RIDES can identify groups of 11-15 potential vanpoolers who have similar commutes. Golden Gate also uses the RIDES computer program to match up vanpool groups. RIDES and Golden Gate vans are also available to groups of commuters identified through the company's own matching methods.

- RIDES provides new 15-passenger, air-conditioned vans to vanpool groups. RIDES guarantees the lease on the van. Golden Gate owns a fleet of 10-15 passenger vans, which are made available to groups. Golden Gate will subsidize vans which are not full for a maximum of two months to get a van started.
- Riders pay and are committed only on a monthly basis, with the fare covering all fixed and operating costs, including insurance coverage and all maintenance (except parking and bridge tolls). Fares vary depending on round-trip commute mileage and number of passengers (see the Appendix for the RIDES fare sheet and a Golden Gate application containing fares).
- The driver is one of the commuters who, in return for driving the van, collecting fares, fueling the van and having maintenance done (paid for out of monthly fares), rides free and has personal use of the van evenings and weekends for a nominal mileage charge.
- Each van has back-up drivers (fellow passengers) to fill in when the principal driver is not able to drive due to sickness, or vacation.
- The driver and back-up drivers must be approved by RIDES or Golden Gate and for any 15-seat van must obtain a California Class 2 driver's license. Both RIDES and Golden Gate will reimburse up to \$25 for the physical exam required by the State of California for both the driver and the back-up drivers in their vans. The license requirement will be dropped on January 1, 1983; however, drivers must still obtain a medical exam and carry proof of such an exam.
- Back-up vans are provided to groups whose vans are out of service. The Golden Gate back-up vans are available to any vanpool operating in the North Bay at a nominal charge. RIDES provides back-up vans for its third-party van program members from its standby fleet.
- Golden Gate also offers a back-up transportation service for vanpoolers who occasionally miss their regular ride from work. (See the information on the Golden Gate Flex-Pool Program in the Carpool section and in the Appendix.)
- A group can continue to vanpool for as long as they like (although Golden Gate vanpoolers transfer after six months to a RIDES van, a privately owned or leased van or a company van). If the group decides to disband, they simply give RIDES or Golden Gate 30 days notice and return the van, which will be turned over to another group. This is a month-to-month arrangement only; no long-term commitment is required.
- Both RIDES and Golden Gate help to find new riders and drivers when necessary for vanpool groups.
- Other than complying with RIDES and Golden Gate requirements that fares be paid on time and that only approved drivers operate the van, the vanpool group is self-governing. All van policies (smoking/nonsmoking, routes, delay time for late-comers, back-up arrangements in case of vehicle malfunction, rates for occasional riders, eating in the van, etc.) are set by the group — it's *their* vehicle.
- Both RIDES and Golden Gate vans can be used as shuttles by companies. (See the Shuttles section of the Transit Chapter.)

RIDES' and Golden Gate's services in helping a company start a vanpool program are extensive and are provided at no cost. However, the organizations do expect a commitment to the ridesharing effort and strongly recommend that a responsible, reliable person be assigned to coordinate the effort with full management support. Companies are asked to keep all applicant information current and to forward update information. RIDES and Golden Gate also suggest that a ridesharing campaign be held periodically, perhaps every six months. Generally, a company conducts a ridesharing campaign that includes promotion and matching for both carpools and vanpools.

When the company holds a ridesharing campaign, each vanpool applicant will receive a match list. A print-out of all company applicants is provided to the company

coordinator, so that the coordinator may encourage potential vanpool groups.

RIDES and Golden Gate staff work with potential vanpool groups to actually start them vanpooling. This effort can take one week to two or three months, depending upon the enthusiasm of the group.

Coordinator Role

The more the coordinator is involved, the more the employees will perceive the company as being committed and the better the communication between the provider of services and the employee will be. The coordinator in effect acts as an extension of the third-party staffs and can be the key ingredient to starting more vans.

Financial and Liability Issues

Management usually will ask: What is the financial and liability risk of third-party vanpooling to our company? There is no financial risk, as the vans are provided by the third-party program, with all fixed and operating costs covered by the vanpool fares. If a vanpool fails, the van is returned to the third-party program. The company, therefore, does not incur any expenses in starting, maintaining or terminating a vanpool. In regard to company liability in the event of an accident, the question is whether workmen's compensation applies. Recent state legislation (AB 549 amending the Labor Code and other state codes) expressly exempts from the definition of a day's work the time spent in commuting, but it does not change or limit the employer's liability under workmen's compensation law.

Additionally, since participation is voluntary, with driver approval and insurance provided by the third-party program, company involvement is limited to administrative support, further protecting the company from liability. Legal opinions from some local employers have concluded that companies involved with a third-party program such as RIDES are free of liability so long as the company has neither had a role in selecting drivers nor entered into any contract with the vanpoolers or the third-party program.

The pros and cons of a third-party vanpool program are summarized on Table 4.

COMPANY-SPONSORED

There are several reasons why a company may choose to offer its own vanpool program. The primary one is the possibility of lower fares brought about by self-insurance, lower purchase price of the van (or a lower lease price through the company's vehicle lease program, if any) and company-provided maintenance. A secondary advantage is that the company that supports such programs gains the good will of the community. Federal and state income tax incentives are also available to companies who purchase or lease vehicles. A company may provide its own vanpool matching service or use RIDES' matching services to form groups for the company-sponsored vanpool.

Fireman's Fund Program

An example of a successful company-sponsored program and how it works is the Fireman's Fund program. Fireman's Fund in San Francisco decided to initiate its own vanpool program when a new facility was being opened in Marin County, generating commuting problems for employees and causing adjacent residential neighborhoods to be concerned about resulting traffic. There was already a proven interest in ridesharing among Fireman's employees, who had started several vans after the inception of Golden Gate's vanpool demonstration program.

TABLE 4
PROS AND CONS OF A THIRD-PARTY VANPOOL PROGRAM

Pros

- No financial or legal commitments for the vans by the company or the employee.
- No cost to company or employees for services of third-party organization (RIDES, Golden Gate).
- No time commitment (the only commitment is on the part of the drivers and riders, and is only on a month-to-month basis).
- Fleet maintenance provided by the third-party.
- Seat subsidy to build vanpool groups (Golden Gate).
- Immediate start-up if groups are ready.
- Experienced staff to help design and carry out ridesharing campaign, plus capacity for long-term maintenance of program (including data base update and continual matching, problem solving, advocacy).
- Proven programs.
- Any given van can have employees from more than one company.

Cons

- Fares may be higher than company-sponsored or owner-operated vans, depending upon the particular circumstances.
- Company does not have complete control of program or complete company identity.

In May 1979, Fireman's Fund decided to purchase three vans and initiate a company-sponsored program on a trial basis. The decision to purchase rather than lease the vans was based on the fact that capital was available and that purchasing was cheaper than leasing, meaning lower fares for the employees. By the end of the six-month trial period, the program had expanded to 11 vans. As of August 1982, the program had 29 vans.

Although Fireman's has its own three-person staff in its transportation division to handle the ridesharing program, it has taken full advantage of Golden Gate's vanpool demonstration program. By starting groups in Golden Gate's vans, Fireman's was able at no risk to "establish" vanpool groups and then move these committed groups into company vans. Fireman's was also able to utilize Golden Gate's matching and marketing services and gain invaluable advice in organizing the company's own program (this type of help is available to any company, at no charge, as are RIDES' services).

The director of the General Services section responsible for the vanpool program advises companies interested in setting up their own program to:

- **Plan for success** — assign the program to a person who will handle it in the long run; avoid "transitions" from one department to another.
- **Utilize third-party programs** for advice and for establishing vanpool groups to move into company vans.
- **Start small** in order to be able to work out all the problems on a small scale. At Fireman's Fund, start-up took up to 90 percent of one person's time.
- **Avoid obsolete equipment** if a computer system is decided upon, and write a user's manual for the program so the next person down the line will understand it.
- **Establish a "commuter committee"** to provide interaction between the coordinator and the employees. It is especially useful to include employees who have already been carpooling or vanpooling or who have been a buspool coordinator.

Developing a Company-Sponsored Program

The steps involved in developing a company-sponsored vanpool program include the following:

- **Determine costs** to the company per van so that fares may be calculated. Costs will include:
 1. Capital costs (out-the-door cost of van, including tax and license, minus sell-out value at end of four years, federal investment tax credit, and state income tax credit). The coordinator should investigate purchasing versus leasing. The Contacts section lists Crocker Bank's financing program for small businesses wishing to purchase a van. Table 21 in the Administration Chapter detail state tax credits.
 2. Operating costs (fuel, oil, maintenance — including tires, routine tune-ups and the like; this amount depends on daily round-trip mileage for 252 working days per year).
 3. Insurance (self-insured or through an insurance company).

Table 5, from RIDES' *The Owner-Operated Vanpool*, gives a detailed methodology for calculating van passenger fares with typical figures. A blank form is included in the Appendix.

- **Survey employees** to determine how many might be interested in vanpooling and whether their commute characteristics fit the success pattern for vanpools (refer to the model survey included in the Administration Chapter). Accompanying this survey should be a description of the company's proposed program and a close approximation of fares.

TABLE 5
SAMPLE VANPOOL COST WORKSHEET

VANPOOL COST WORKSHEET

I Monthly base costs

A Loan payment = \$ 465
 B Insurance = \$ 65
 C Annual DMV fees \$ 263 ÷ 12 = \$ 22
 Add A, B, and C = \$ 552

II Monthly maintenance costs

A Cost of tune-up (\$ 100)
 Divide A by miles between tune-ups (15,000) = \$0 006
cost per mile
 B Cost of an oil change (\$ 30)
 Divide B by miles between oil changes (5,000) = \$0 006
cost per mile
 C Cost of four tires (\$ 600)
 Divide C by mileage life of a set of tires = \$0 010
cost per mile
 D Cost of contingency fund, or
 Per mile charge for non-routine maintenance = \$0 038
cost per mile
 E Add A, B, C and D costs per mile = \$0 06
total per mile
 F Multiply E by commute mileage per month 1680 × E = \$ 101

III Subtotal I + II to find your Monthly Fixed Cost

= \$ 653

IV Monthly fuel costs

A Typical cost of fuel per gallon = \$ 1.30
 B Divide A by average miles per gallon ÷ 10
 C Equals total cost of fuel per mile = \$0 13
 D Multiply C by monthly commute miles 1680 × C = \$ 219

V Miscellaneous expenses per month

All other operating expenses:
 A Monthly parking \$ N/C
 B Monthly bridge tolls \$ 2.10
 C Miscellaneous others \$ 3.00
 Add A, B, and C = \$ 5

VI Add I, II, IV, AND V FOR TOTAL MONTHLY COSTS

= \$ 877

VII Monthly fare per rider: Divide VI by number of riders

877 ÷ 13 = \$ 68

- **If response to the survey and fare structure is positive, prepare a specific proposal**, including administrative, matching, marketing and program maintenance functions. This proposal should be evaluated by such company departments as legal, insurance, personnel and transportation. Expect many changes and adjustments to be made. Elements that must be considered include:
 1. Identification of number of potential vanpool groups — i.e., how big is your market?
 2. Possibility of using Golden Gate or RIDES vans to establish groups, with a transition to company vans.
 3. Total operating/capital costs for vans. Deduct federal and state tax credits. (An example of a vanpool tax credit calculation is included in the Appendix.)
 4. Insurance (options include extending existing fleet insurance or umbrella policy to cover vanpools, self-insurance, a special vanpool policy, or insurance through the lease company if the vans are leased). The objective is to provide adequate coverage for the vanpoolers while limiting the liability of the company.
 5. Program incentives, including subsidies and preferential parking. (Income tax deductions are allowed for the cost of subsidies; see Tables 19 and 20.)
 6. Estimated fares and total revenues.
 7. Driver selection process and training.
 8. Maintenance schedule for vehicle fleet.
 9. Personnel to implement and maintain program, including at least a vanpool coordinator and a fleet manager.
 10. Possibility of using RIDES or Golden Gate data base and matching services to form vanpool groups or in-house data base storage and retrieval system for matching and other program functions.
 11. Marketing plans.
 12. Forms, reports, etc., to be used in the program.
 13. Monitoring and evaluation system.

It is very important to remember that the vanpool program isn't finished when the first van goes on the road. A continuing commitment of personnel and funding is necessary to expand the program and keep existing vans operating. If your company is interested in implementing its own vanpool program, it is advisable to visit other programs, such as Fireman's Fund, to learn from their experiences and get firsthand all the details of a successful program. The advantages and disadvantages of a company-sponsored program are summarized in Table 6.

OWNER-OPERATED

Private individuals have been operating their own vanpools for a number of years. For instance, at the United Airlines Maintenance Base in San Mateo County (10,000 employees) over 80 private vanpools have been operating for some time and have been receiving preferential parking in United's parking facilities.

Since the basic goal is to start employees ridesharing, your company might want to consider providing the same incentives for private vanpools as it does for company-sponsored or third-party vanpools. Crocker Bank has established a program to finance owner-operated vans (see Contacts). RIDES' new publication, *The Owner-Operated Vanpool: A Guide to Success*, carefully outlines the latest tax and

TABLE 6
PROS AND CONS OF A COMPANY-SPONSORED
VANPOOL PROGRAM

Pros

- Possible lower fares.
- Possible to collect fare through payroll deductions.
- Total company control of program.
- Public relations value.
- Tax credits. (Employers that provide a commuting vehicle may be entitled to an investment credit under the Federal Energy Tax Act of 1978. State legislation, SB 321, provides an income tax credit of 20 percent of non-operating costs of a vanpool or shuttle bus).
- Use of vans during work day for company business.
- Employee benefit (if desired).*
- Decreased employee tardiness and absenteeism.*
- Incentive in attracting new employees or keeping existing employees.*

Cons

- Financial obligation for vehicles (company must pay for purchase or lease of vans).
- Insurance and legal liabilities (company may face increased premiums, workmen's compensation suits or other liability suits).
- Long-term commitment.
- Heavy personnel and budgetary commitment for start-up and maintenance of program.

*Also applies to successful third-party programs

financial considerations. Also available is *A Guide to Owner-Operated Vanpools* from Golden Gate. Golden Gate or RIDES will assist companies that want to help employees start private vanpools. Or the coordinator may refer interested employees directly to the ridesharing agencies. RIDES will help qualified applicants obtain 100 percent financing for their owner-operator vanpool. They will also provide a data base to begin the group, and the expertise of a vanpool coordinator.

Owner-operated vanpools can be less expensive than third-party vanpools due to such factors as better financing, lower insurance rates for an owner's second vehicle, and avoidance of leasing company fees. Owner-operated vans are less of a burden and risk for employers to organize than employer-owned vans.

There are two ways to run an owner-operator vanpool. It can be operated as a personal vehicle, charging fares to cover most expenses. As long as income equals outgo, the owner's tax status remains unchanged. Table 5 shows how to calculate operating costs and fares.

If an owner-operator is willing to keep meticulous records, the van can be run as a business. There are tax and financial advantages to this method of operation. The RIDES vanpool publication mentioned above will provide you with more detailed information.

The company's role in promoting private vanpools could be to:

- provide information to potential drivers on operating a vanpool;
- obtain assured, 100 percent financing (so that the potential driver does not have to make a large out-of-pocket down payment);
- help form the vanpool group;
- obtain favorable insurance rates;
- provide incentives (preferential parking, fueling services, etc.) and market the program.

Pros and cons of an owner-operated vanpool program are summarized in Table 7.

TABLE 7
PROS AND CONS OF AN OWNER-OPERATED
VANPOOL PROGRAM

Pros

- Employee has own vehicle paid for by riders' fares and tax benefits in return for time and effort spent in starting and maintaining vanpool.
- Possible lower fares.
- No company capital investment or administrative burden required; no company liability foreseen.
- Drivers are motivated to keep vanpools operating.

Cons

- Adequate insurance coverage may be expensive and difficult to obtain without the employer's assistance. The coordinator should stress that an insurance policy for a vanpool should be comprehensive enough to cover medical and liability expenses for 10 to 14 passengers, as well as uninsured motorist.
- Driver/owner must do all the administrative and problem-solving activities that would normally be done by a company or third-party vanpool coordinator. It should be noted, however, that the matching and advisory services of RIDES and Golden Gate are available to any vanpool driver.
- If the vanpool group disbands after the first year or ridership rates fall below a break-even point, the driver/owner must absorb any losses and/or sell the van.

BUSPOOLS

Buspools are also known as charter, club or subscription buses. The role of the company transportation coordinator in setting up a buspool is to identify a potential group of 30 to 40 employees who live in the same area, have the same work hours and travel to the same employment site or area. Once such identification has been made, the coordinator can work with RIDES, Golden Gate Transit or the California Public Utilities Commission (which all provide assistance in starting buspools), or work directly with a charter bus company to set up the service.

THIRD-PARTY

The Golden Gate Club Bus Program (which serves only San Francisco commute trips originating in Marin, Napa and Sonoma Counties) works as follows:

- Golden Gate contracts for services from private charter companies. This contract includes specifications that will ensure high-quality service for the passengers.
- Passengers generally meet at a central pickup point and travel nonstop to their destination. The contractor provides the bus and driver and is responsible for maintenance, fueling, etc.
- Golden Gate bills the group monthly for the cost of the bus service, minus a subsidy provided by the district. The group will set its own fares to cover this cost. Many groups over-subscribe to ensure that costs will be met, since on any given day only 70-75 percent of the subscribers actually ride.
- Insurance, rider referrals and administrative details involved in setting up and maintaining a bus are provided by Golden Gate. Golden Gate also operates an equipment inspection program to ensure that the vehicles being used by the charter operator are safe and well-maintained.
- The club (those people who have subscribed to the service) is responsible for setting its own operating rules, fares and route and for fare collection. Usually a group will elect an officer who handles all these details in return for a free commute.

Golden Gate has 25 club buses now in operation. The average commute is 75 miles one-way, with an average fare of \$55 to \$75 per month. These buses all travel to San Francisco from points such as Terra Linda, Sonoma, Napa, Glenwood, Petaluma and Rohnert Park.

COMPANY-SPONSORED

A company may sponsor buspools by purchasing vehicles and hiring drivers or may contract with a charter bus service. In setting up a buspool with the company acting as the broker, there are several important points to keep in mind:

- Keep costs down. Consider options such as purchasing used equipment; self-insure if possible; use a part-time driver or utilize an employee who has the same commute and give him or her a free commute and a cash bonus for each hour spent driving; give the contractor as long a contract as possible (at least

three years) because financing will be easier to obtain.

- Set seat costs realistically.
- Specify service areas as exactly as possible so that the contractor can give an accurate cost proposal.

Buspool fares can be higher than car or vanpooling costs but are still much less expensive than driving alone. A buspool may be the preferred solution for a large group of employees who have a long commute that is not adequately served by public transit. Your company may, however, have to consider subsidizing the fares to attract riders.

OWNER-OPERATED

As in vanpooling, some buspools are privately owned and operated by employees. The employee obtains financing and purchases a vehicle, covering expenses and possibly making a profit by charging a fare for the commute trip. The owner may do the driving or may offer a fellow employee a free commute and/or a cash bonus to drive. The owner is responsible for maintaining the bus, finding passengers, solving problems, etc.

In the Bay Area, the United Airlines Maintenance Base in San Mateo reports that there are 30 owner-operated buspools serving 1,200 employees. The first bus started operation in 1975. United Airlines provides preferential parking for the buses, and its credit union assists employees in obtaining financing.

The coordinator's role in promoting owner-operated buspools is similar to that played with private vanpools:

- obtain assured, 100 percent financing;
- obtain favorable insurance rates;
- help form the group;
- provide incentives and matching services.

The pros and cons of owner-operated buspools are similar to those of owner-operated vanpools.

Public Utilities Commission Certification

A new commute buspool route must be certified by the State Public Utilities Commission. (Vanpools of 15 passengers or less are exempt from PUC regulations.) The PUC is primarily concerned with the safety of the operation and fairness to the consumer. The route-approval procedure takes approximately 30 days. If a charter bus is used, the charter company will handle PUC approval. If a company or privately-owned bus is used, the owner is responsible for fulfilling PUC requirements.

The PUC has a Bus Development Staff that offers technical assistance in evaluating the need for service, designing routes and fares, and purchasing equipment. (See the Contacts section for PUC contact information.)

Table 8 summarizes the steps in setting up buspools.

TABLE 8
BUSPOOLING PROCEDURES

- **Utilizing applications from the car/vanpool campaign** (or commute information obtained from the company survey), identify the potential buspool group.
- **Meet with the group**, determine the level of interest, select an officer to help coordinate.
- **If there is sufficient interest**, investigate options — public transit, charter bus company, employee owned bus.
- **Secure bids** from charter companies or assist with obtaining financing and PUC approval for privately owned buses; determine fare.
- **Work with the officer** to secure commitments from the group based on the projected fare.
- **If the group is firmly established**, sign a service contract with the charter company, and set a start-up day.
- **Follow up** (answer questions, solve problems, replace dropout riders).

REFERENCES

Ridesharing:

- *Commuter Transportation Program, Santa Clara County Transit District*, May 1980 (available from the Transportation District, 1555 Berger Drive, San Jose, CA 95112).
- *How Ridesharing Can Help Your Company*, 1979 (available from Ridesharing Office, U.S. Department of Transportation, Room 4432, 400 7th St., S.W., Washington, D.C. 20590).
- *Ridesharing: An Easy Way to Save Gas and Money* (valuable for cost-saving comparisons; available from the Public Administration Management Division, HHP-33, Federal Highway Administration, 400 7th St., S.W., Washington, D.C. 20590).

Carpools:

- *Commute Alternatives: Carpool Handbook* (available from MTC, Hotel Claremont, Berkeley, CA 94705).
- *Manual Carpool Matching Methods*, January 1974 (available from the U.S. Department of Transportation, Federal Highway Administration, Urban Planning Division, Washington, D.C. 20590).

Vanpools:

- *A Guide to Owner-Operated Vanpools* (available from Golden Gate Ridesharing Division, P.O. Box 9000, Presidio Station, San Francisco, CA 94129; phone 415-921-5858).
- *The Owner-Operated Vanpool: A Step-by-Step Guide to Success* (available from RIDES for Bay Area Commuters, 100 Van Ness Ave., San Francisco, CA 94102; phone 415-861-POOL).
- *The 3M Commute-A-Van Program, Status Report II*, January 1977 (update available soon; report can be obtained from 3M, General Offices, 3M Center, St. Paul, MI 55101).
- *Vanpooling — A Commuting Alternative That Works*, Continental Oil Company, 1978 (can be obtained from Conoco, P.O. Box 2197, Houston, TX 77001).
- *Vanpooling for Profit: A Business Opportunity* (available from Alliance to Save Energy, 1925 K St. N.W., Suite 507, Washington, D.C. 20006).

Buspools:

- *Club Bus Contract* (available from Golden Gate Ridesharing Division; see above).
- *Expedited Application Procedure for Home to Work Passenger Stage Routes*, revised August 28, 1980 (available from California Public Utilities Commission, California State Building, San Francisco, CA 94102; phone 415-557-3092).

Matching Programs:

- *FHWA Carpool Matching Program*, 1975 (available from the National Ridesharing Information Center, FHWA, Room 3215, Washington, D.C. 20590).
- *Ridesharing and the Data Base Management System* (available from Lawrence Livermore Laboratory, P.O. Box 808, L-426, Livermore, CA 94550; library code UCRL-86543).
- *San Francisco Interactive Ride Matching System, 1980* (available from RIDES for Bay Area Commuters, Inc., 100 Van Ness Ave., San Francisco, CA 94102).

Bibliography of Ridesharing Publications and Audiovisual Materials

- National Ridesharing Information Center
Federal Highway Administration
Room 3215
400 - 7th St., S.W.
Washington, D.C. 20590
(202) 426-0210

(The Center may also be contacted if you wish to speak to ridesharing experts for advice on setting up or enlarging carpool or vanpool programs.)

CONTACTS

Ridesharing Assistance Organizations:

- RIDES for Bay Area Commuters, Inc.
Mindy Kershner, Director, Employer Services
(415) 861-POOL
(408) 996-POOL
- Golden Gate Bridge, Highway, and Transportation District
Ridesharing Division
Dee Lukshin, Outreach Services Coordinator
(415) 921-5858 ext. 260
Sue Chiaroni, Subscription Bus Program
(415) 457-3110
Kay Magill, Brokered Carpool and Flexpool Program
(415) 921-5858 ext. 321
- Santa Clara County Transit District
Jim Lightbody, Senior Transit Engineer
(408) 299-4141
Rideshare Information Numbers
North County: (408) 965-3100
Central County: (408) 287-4210
South County: (408) 683-4151
- Santa Cruz County Share-a-Ride
Walter Richard Allen and Ken Thomas
Program Coordinators
(408) 429-POOL
- Sonoma County Ridesharing
Anne Daniel, Coordinator
(707) 527-POOL
- Solano County Rideshare
Sharon Falkner, Ridesharing Manager
(707) 429-6463
- Berkeley TRiP
Laurie Udell, Program Director
(415) 644-POOL

Information on Ridematching Computer Programs:

- RIDES for Bay Area Commuters, Inc.
Frank Harris, Director of Operations
(415) 861-POOL

Rideshare Hotline:

- FHWA National Ridesharing Information Center
(202) 426-0210
(for expert ridesharing advice and information on available publications and materials)

Caltrans Park-and-Ride Lots:

- Caltrans, District 04
Merle Johnson
(415) 557-8594

Caltrans Vanpool Preferential Parking:

- Caltrans, District 04
Jim Moon
(415) 557-0130

BARTPOOL Program:

- Applications and Information
(415) 465-4100 ext. 805
Administration:
Jim Evans
(415) 465-4100

Financing for Small Business and Owner-Operator Vans:

- Crocker Bank
Kim Bercaw, Assistant Vice President
Business Banking Department
(415) 477-3374

Buspool Certification:

- California State Public Utilities Commission
State Building, Civic Center
Room 7188
San Francisco, CA 94102
Marc Gottlieb, Bus Development Staff
(415) 557-3092
or Elliot Bershodsky (415) 557-3171
Erik Juul (415) 557-3123

Company Programs:

- Lawrence Livermore National Laboratory
Joe Padrosky, Ridesharing Coordinator
P.O. Box 808, L-426
Livermore, CA 94550
(415) 422-POOL
- Bank of America, Corporate Headquarters, San Francisco
Lois McLain, Transportation Coordinator
Dept. 3602
P.O. Box 37000

San Francisco, CA 94137
(415) 622-2240

- Children's Hospital, San Francisco
Cliff Chambers, Transportation Broker/Coordinator
355 Buena Vista East
San Francisco, CA 94117
(415) 864-7552 ext. 246
- Hewlett-Packard, Palo Alto
Wayne Herriford, Transportation Coordinator
Bldg. 20-AM
Hewlett-Packard
3000 Hanover
Palo Alto, CA 94304
(415) 857-1501
- Fireman's Fund
Dan Townsend, Director, General Services
777 San Marin Drive
Novato, CA 94998
(415) 899-2091 — for administrative and management questions
Art Cooke, Transportation Coordinator, Novato
(415) 899-2450
Barbara Emery, Transportation Coordinator, San Rafael
1600 Los Gatos Drive
San Rafael, CA 94911
(415) 492-6827

APPENDIX

- Ridesharing Application, RIDES
- Match List Letter, RIDES
- Sample Match List, RIDES
- Estimated Monthly Fares, RIDES
- Questions Most Often Asked, RIDES
- Vanpool Cost Worksheet, RIDES
- Order Form for Ridesharing Materials, RIDES
- Ridesharing Application, Golden Gate Ridesharing Division
- Vanpool Fare Sheet, Golden Gate
- Flex-pool Letter, Golden Gate
- Memo on Transportation Program, Fireman's Fund
- Fireman's Fund Carpool Matching Program — Questionnaire
- Fireman's Fund Carpool Matching Program — Grid Map Sample
- Pro-forma Calculation of Tax Benefits

THE HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT
BY
JOHN STOW.
1618.

GET IN ON THE BIG MONEY NOW! APPLY FOR RIDE-SHARING TODAY!

PLEASE SEND ME MY FREE MATCHLIST

Please print the following information using only one letter per box. ABBREVIATE where necessary. Be specific in home and work address. Example: Is it a Street (St.), Road (Rd.), Avenue (Ave.), etc? Provide apartment number where applicable. Forms without a phone number cannot be processed. *Home phone number is optional.

NOTE: Home and work addresses are confidential. The rest of the information will only be used for ridesharing purposes. No obligation is involved in filling out this form.

I'M INTERESTED IN CARPOOLING IN AN EMERGENCY ONLY. ☐

First Name										Last Name														
Home Address (Incl. Apt. No.)															Nearest Cross Street									
Home City										Home Zip														
Area Code		Home Phone*		Area Code		Work Phone		Extension																
Employer																								
Work Address															Nearest Cross Street									
Work City																								

Are your hours flexible by more than 45 minutes? ☐ Yes ☐ No

Begin Work : ☐ AM ☐ PM

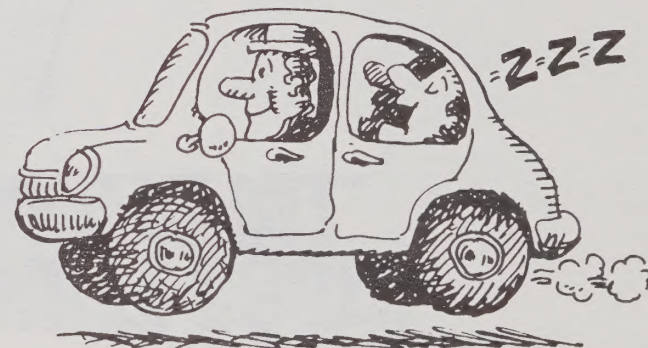
Leave Work : ☐ AM ☐ PM

Please check as many as apply:

I would like to Carpool ☐ I have a car available for Carpooling ☐ I would like to Vanpool ☐ Tell me more about being a Vanpool Driver or backup driver ☐

I normally get to work by:			I heard about RIDES mainly through:		
A ☐ Driving alone	F ☐ Vanpool	L ☐ Walk	A ☐ Employer/School	F ☐ TV	M ☐ Direct Mail
B ☐ Carpool	G ☐ SP	M ☐ Drive & Transit	B ☐ Freeway signs	G ☐ Radio	N ☐ DMV
C ☐ Bus	H ☐ Club Bus	N ☐ Park & Pool	C ☐ Friend	H ☐ Utility Bill	O ☐ Counter Display
D ☐ BART	I ☐ Ferry	P ☐ Motorcycle	D ☐ Saw Vanpool	K ☐ Community mtg	Z ☐ Other
E ☐ Drop Off	K ☐ Bicycle	Z ☐ Other	E ☐ Newspapers	L ☐ Energy Fair	

HOW TO MAKE MONEY COMING AND GOING.



OR HOW YOU CAN CUT YOUR COMMUTE COSTS WITHOUT DOING HARDLY ANYTHING AT ALL.



It costs you a lot more money to commute to work than you may think.

The average commuter in Northern California shells out about \$2,000 a year, just to drive back and forth to work. And none of that is tax deductible.

But you *can* cut your commute costs dramatically. By one half. Or two thirds. Or more.

It really is like putting extra money in your pocket.

THE SIMPLE SOLUTION: RIDESHARING.

Ridesharing—carpooling or vanpooling—is the very best way to lower the expense of commuting. And it's the most fuel efficient way to go to work.

So you not only save money, you help save the environment and conserve our fuel resources.

IT'S VERY, VERY EASY TO FIND A CARPOOL OR VANPOOL.

All you do is fill out the application on this form and give it to your ridesharing representative at your place of work or send it directly to us, RIDES.

Then we send you a personalized list of commuters who want to share rides with you. Each person on your list lives near you, works near you and commutes at approximately the same time as you.

Some will be people with cars or vans who want riders. Some will be people who want to be riders or want to share the task of driving.

You just call up the phone numbers on your list, and before you know it, you'll find yourself in a carpool or vanpool.

Whether you want to drive, share the driving, or just sit it out in the back seat, saving big money is as easy as that.

SAVE EVEN MORE MONEY AS A VANPOOL DRIVER: RIDE FOR FREE!

If you can qualify, you can become a Vanpool Driver and ride for free. Plus you can use the van evenings and weekends. It's like having a second car free!

We supply the van, help you put the vanpool together, and help you maintain the van. You drive, collect fares, and make sure at least 10 or more people are going with you each workday.

It's a great deal. If you're interested, just check the box marked Vanpool Driver on the application.

FILL OUT YOUR RIDESHARING APPLICATION TODAY.

So whether you want to drive a car or a van or would prefer just being a rider, now's the time to fill out your ridesharing application.

It only takes a minute. But it could save you a small fortune.

DO YOU KNOW HOW MUCH IT COSTS YOU TO GO TO WORK?

Use this worksheet to figure your commute costs. Then compare them to the figures for ridesharing below. In general, if you share a ride with just one other person, you can cut your costs in half.

		Monthly Gas	_____
		Monthly Parking	_____
		Monthly Tolls	_____
		Monthly Wear and Tear and Depreciation (figure 15¢/mile)	_____
		Total	_____
Daily Commute Miles	3-Person Carpool	Vanpool (13 riders)	Vanpool Driver
30	\$ 55	\$45	\$0
50	77	52	0
70	100	60	0
90	122	67	0

rides
FOR BAY AREA COMMUTERS, INC.

100 Van Ness Ave.
San Francisco, CA 94102
(415) 861-POOL, (408) 996-POOL



FOR BAY AREA COMMUTERS, INC.

100 Van Ness Ave.
San Francisco, CA 94102
(415) 861-POOL, (408) 996-POOL

Dear Friend:

Your personalized ridesharing matchlist is enclosed. From now on it's up to you! Give your neighbors a call to see how you can best share the commute. Flexibility in pickup points and hours can often be arranged. Give it a try. There's a lot riding on it!

Commuters interested in either carpooling or vanpooling may be included on your list. Their main ridesharing preference is designated in the following way:

- CAR AVAILABLE – Car available for carpooling.
- CAR RIDER – Interest in being a carpool rider.
- EMERGENCY – Interest in emergency carpooling only.
- VAN FORMING – Qualified driver now forming a vanpool.
- VAN RIDER – Interest in being a vanpool rider.
- VAN DRIVER – Seats Available. Call Now!

Two or more neighbors make a successful carpool. With three or more, you may use the toll-free carpool lanes during peak hours on several bridges in the Bay Area to reduce the commute time.

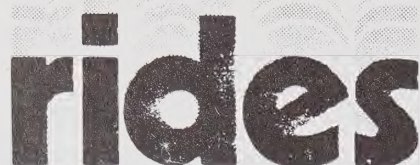
You're now enrolled in the ridesharing program for the next six months. For a new matchlist with the most current names available, give us a call anytime at (415) 861-POOL, or (408) 996-POOL.

Also, if some of those you call have changed their home or work locations, or if your own commute information has changed, please let us know. This will help keep us current.

Thank you for using RIDES. Start Saving Today!

Sincerely,

Jo Anne Schlegel
Manager, Client Services



FOR BAY AREA COMMUTERS, INC.

(415) 861-POOL
(408) 996-POOL
(707) 447-POOL

MATCH LIST

Berkeley TRiP
(415) 644-POOL
Golden Gate Ridesharing
(415) 921-5858
Santa Clara County
Transit District
(408) 287-4210
Share-A-Ride
(408) 429-POOL
Solano Rideshare
(707) 447-POOL
Sonoma County Rideshare
(707) 527-POOL

SUZI SAMPLE
123 SWEET STREET
COTTERSVILLE, CA 94111

TUE, JUL 13, 1982, 11:12 AM 0013
ORIGIN: COTTERSVILLE
DESTINATION: BIRCHLAND
EMPLOYER: CONGLOMERATE INC

NAME EMPLOYER	HOME PHONE WORK PHONE	EXT.	START WORK LEAVE WORK	ORIGIN DESTINATION	CAR POOL VAN POOL
LYLE FRANSON FRAMERS WORKSHOP	(215)344-5675 (215)493-0382	0	7:30AM 4:00PM	COTTERSVILLE BIRCHLAND	VanForming
PABLO KORELLI BAY & FARMER	(215)897-6563 (215)987-8654	0	8:00AM 5:00PM	COTTERSVILLE SANTA MARGARITA	Van Driver
KEN CLYDESDALE DATE MINDER	(215)555-8691 (215)767-4672	78	7:30AM 4:30PM	COTTERSVILLE BIRCHLAND	Car Avail. Van Rider
CONNIE SWATHMORE ALLIED INC	(215)555-6571 (215)767-4672	0	8:00AM 5:00PM	COTTERSVILLE BIRCHLAND	Car Avail. Van Rider
GWENDOLYN COOPERSTEIN STUDENT	(215)343-2567 -	0	FLEX. FLEX.	COTTERSVILLE BIRCHLAND	Car Rider
CECELIA BURNSBEE SKI TRAVEL	(215)487-8394 (215)767-8765	0	8:00AM 5:00PM	MCFEARSONS VLY BIRCHLAND	Van Rider
BOBBIE REYNOLDS COUNTY OFFICES	(215)656-4539 (215)987-4321	0	FLEX. FLEX.	MCFEARSONS VLY SANTA MARGARITA	Car Avail. Van Rider
NORMA LORNSKI CITY ZOO WORKS WED THRU SUN	(215)839-5643 (215)987-8976	0	7:30AM 4:00PM	MCFEARSONS VLY SANTA MARGARITA	Car Rider Van Rider
PETER MOORE MAPS INC	- (215)842-3950	0	8:30AM 5:00PM	MCFEARSONS VLY BIRCHLAND	Car Avail.
ELMER GOUGH ELECTRIC COMPANY	(215)675-4337 (215)989-7653	0	8:30AM 4:30PM	MCFEARSONS VLY SANTA MARGARITA	Car Rider Emergency

FOR INFORMATION REGARDING TRANSIT ALTERNATIVES PLEASE CALL THE FOLLOWING:

COTTERS FERRY 215-555-7438 FERRY MASTER
BIRCHLAND EXPRES 215-555-6428

Now it's up to you! Call these neighbors and start pooling!

- CAR AVAIL—Car available for carpooling.
- CAR RIDER—Interest in being a carpool rider.
- EMERGENCY—Interest in emergency carpooling only.
- VAN FORMING—Qualified driver now forming a vanpool.
- VAN RIDER—Interest in being a vanpool rider.
- VAN DRIVER—Seats Available. Call Now!



RIDES FOR BAY AREA COMMUTERS, INC.
THIRD-PARTY VANPOOL PROGRAM
 (415) 861-POOL (408) 996-POOL

March, 1982

ESTIMATED AVERAGE MONTHLY FARES — Per rider

NUMBER OF PASSENGERS

Round Trip Miles	14 Riders	13 Riders	12 Riders	11 Riders	10 Riders	Driver
21-30	39.50	42.60	46.10	50.30	55.30	\$0
31-40	42.50	45.80	49.60	54.10	59.50	0
41-50	45.50	49.00	53.10	57.90	63.70	0
51-60	48.50	52.20	56.60	61.70	67.90	0
61-70	52.60	56.60	61.30	66.90	73.60	0
71-80	55.70	60.00	65.00	70.90	78.00	0
81-90	58.90	63.40	68.70	74.90	82.40	0
91-100	62.00	66.80	72.30	78.90	86.80	0

- 1) Fully equipped Deluxe Van — B300 Dodge Royal Sportsman Maxiwagon, 15-passenger. Fare includes lease, insurance, maintenance, and estimated fuel costs — everything but parking and bridge tolls!
- 2) Driver rides free and has personal use of the vehicle evenings and weekends. Personal mileage over 100 is charged at \$0.08 per mile.

IMPORTANT NOTE:

The above prices represent our fleet average.

QUESTIONS MOST OFTEN ASKED ABOUT RIDES THIRD-PARTY VANPOOLS

How much is the fare?

Each passenger pays an average of 4¢ per mile fare which covers the costs of leasing, insurance, registration, maintenance and gasoline. RIDES does not impose an administrative charge, so we are able to offer our vanpool program at the lowest possible price.

Who does the driving?

A member of each vanpool who qualifies as a good driver operates the van in exchange for a free commute and other benefits.

How are fares collected?

To reserve a seat on the van, you pay a monthly fare to your driver/coordinator.

What is my commitment to the van?

The driver and rider make only a month-by-month commitment. There are no financial risks or liabilities to the driver or the passengers. You may choose to terminate your participation with only a 30-day notice.

Who recruits new passengers?

RIDES assists in filling empty seats. However, everyone should help to recruit new passengers so as to keep costs as low as possible.

What happens to the vanpool group when the driver is sick or on vacation?

Each vanpool group has backup drivers who can take over in these circumstances.

Does the same person drive every day?

The driver/coordinator may drive every day or share the driving with backup drivers.

Does the van provide door-to-door service?

Each group sets their own route and schedule. Many vans go door-to-door, while others have common meeting points. RIDES can assist in planning pick-up and drop-off points.

What happens if a rider is sick or on vacation?

Your fare reserves your seat for the entire month, but many vanpools have waiting lists of occasional riders who would sublet your seat.

Does the driver have personal use of the van?

Yes, the driver and backup drivers enjoy a maximum of 500 personal miles per month. Mileage over 100 is charged at only 8¢ per mile (gas not included).

What are the drivers' basic responsibilities?

Drivers are responsible for picking up and delivering passengers, arranging for van maintenance, fueling and fare collection. They have no financial liability for fares, maintenance or other costs. RIDES staff is always available for problem solving.

Are special driver's licenses required?

The driver and backup drivers need a Class II license to drive a 15-passenger van. RIDES provides assistance in obtaining this license.

How much insurance is carried on the van?

RIDES carries a \$2 million insurance policy per occurrence on each van. RIDES even pays the deductible.

Is smoking permitted in the van?

You and your fellow riders decide whether or not smoking is permitted.

How do I join?

Call RIDES or fill out a RIDES application. We can let you know if there are vanpool seats available immediately or help you start a vanpool from your neighborhood.

How can I become a driver?

Call RIDES and ask for a driver application form.

CALL A RIDES VANPOOL COORDINATOR, IF YOU HAVE MORE QUESTIONS.

(415) 861-POOL

(408) 996-POOL



VANPOOL COST WORKSHEET

I. Monthly base costs

A. Loan payment = \$ _____

B. Insurance = \$ _____

C. Annual DMV fees \$ _____ ÷ 12 = \$ _____

Add A, B, and C \$ _____ (I)

II. Monthly maintenance costs

A. Cost of tune-up (\$ _____ .)
Divide A by miles between tune-ups (15,000) = \$0. _____
cost per mile

B. Cost of an oil change (\$ _____ .)
Divide B by miles between oil changes (5,000) = \$0. _____
cost per mile

C. Cost of four tires (\$ _____ .)
Divide C by mileage life of a set of tires = \$0. _____
cost per mile

D. Cost of contingency fund, or
Per mile charge for non-routine maintenance = \$0. _____
cost per mile

E. Add A, B, C and D costs per mile = \$0. _____
total per mile

F. Multiply E by commute mileage per month _____ × E = \$ _____ (II)

III. Subtotal I + II to find your Monthly Fixed Cost = \$ _____

IV. Monthly fuel costs

A. Typical cost of fuel per gallon \$ _____

B. Divide A by average miles per gallon ÷ _____

C. Equals total cost of fuel per mile = \$0. _____

D. Multiply C by monthly commute miles _____ × C = \$ _____ (IV)

V. Miscellaneous expenses per month

All other operating expenses:

A. Monthly parking \$ _____

B. Monthly bridge tolls \$ _____

C. Miscellaneous others \$ _____

Add A, B, and C = \$ _____ (V)

VI. Add I, II, IV, AND V FOR TOTAL MONTHLY COSTS = \$ _____ (VI)

VII. Monthly fare per rider: Divide VI by number of riders _____ = \$ _____ (VII)



FOR BAY AREA COMMUTERS, INC.

100 Van Ness Ave.
San Francisco, CA 94102
(415) 861-POOL, (408) 996-POOL

ORDER FORM FOR RIDESHARING MATERIALS

Company Coordinator: _____
Company : _____
Address : _____
City, State, Zip : _____
Phone : () _____
Number of Employees: _____

Please send me the following materials in the quantities indicated:

_____ RIDES mailback brochure/matchlist applications
_____ RIDES non-mailback brochure/matchlist applications
_____ Brochure/application dispensers
_____ Park 'n Ride brochures
_____ Bartpool brochures
_____ Posters, 8½ x 11"
_____ Posters, 17 x 22"
_____ Carpool Guidelines wallet cards
_____ Carpool Riders Wanted posters
_____ Vanpool Riders Wanted posters
_____ Vanpool Fact/Fare sheets
_____ Vanpool driver applications
_____ Sample coverletter/newsletter packets

Please call me to set up an _____ executive meeting on a ridesharing
_____ employee campaign for my company.

PLEASE RETURN THIS FORM TO:

RIDES for Bay Area Commuters
100 Van Ness Avenue
San Francisco, CA 94102
Attention: Kathy Hamer

13613



Work address: Example: Is it a Street (St.), Road (Rd.), Avenue (Ave.), etc? Provide apartment number where applicable.
Forms without phone numbers cannot be processed.

HOME INFORMATION		WORK INFORMATION		NORMAL WORK SCHEDULE		COMMUTE INFORMATION	
Work address: Example: Is it a Street (St.), Road (Rd.), Avenue (Ave.), etc? Provide apartment number where applicable. Forms without phone numbers cannot be processed.		Company Name: _____ Street Number: _____ Street Name: _____ City: _____ State: _____ Zip Code: _____ Area Code: _____ Work Phone: _____ Extension: _____ Cross street nearest your work address: _____		EXAMPLE → Show 8 00 A M as Hour: 08 Minutes: 00 AM PM ☒ ☐ Hour: 04 Minutes: 30 AM PM ☐ ☒ Begin Work: _____ Leave Work: _____ Can you arrange up to a 30 minute adjustment in your working hours? Yes ☐ No ☐		In a Van Pool would you prefer to be a 1 normally get to work by: ☐ Alone ☐ Car ☐ Pool ☐ Citi ☐ Transit ☐ Bus ☐ Other ☐ 2 Back up Driver ☐ Passenger ☐ 3 If a convenient bus were available to you, would you try it? Yes ☐ No ☐ 4 Would you like to receive a free Car Pool match list? Yes ☐ No ☐ 5 In a Car Pool would you prefer to: Drive ☐ Ride ☐ Either ☐	

Completion of this application places you under no obligation. This information is confidential and will be treated accordingly.

FOR OFFICIAL USE ONLY

Golden Gate will soon be offering two new ridesharing services.

The first of these is a back-up service for poolers who are occasionally unable to meet their regular pool due to late work hours or other variations in their commute schedule. The second program is an innovative approach to carpooling.

More information on these new services will be forthcoming as the programs develop.

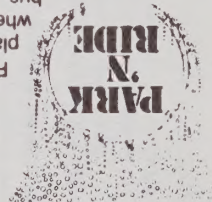
Club buses differ from public buses in that they pick up only subscribing members at or near their homes, and travel non-stop to the employment destination.

Golden Gate contracts with independent carriers to provide buses to the clubs at competitive rates, then carefully monitors operations for safety and dependability to insure a consistent, high level of service.

Club buses are ideal for areas that are not served by transit. A commute club can be started with about 35 people. Such on-board amenities as newspapers, coffee, doughnuts and Friday evening parties, have made the club bus commute a very popular option. If you're interested in starting a club or getting into one that's already operating, call our office today.



Golden Gate Ridesharing serves the North Bay counties in cooperation with RIDES for Bay Area Commuters, Inc.



Park 'n' Ride lots are places to leave your car when meeting your pool or bus. There are several spots throughout Marin and Sonoma counties that have been designated as Park 'n' Ride lots. For a complete list of these locations, contact the Golden Gate Ridesharing office.



GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT
RIDESHARING DIVISION
Box 9000, Presidio Station
San Francisco, California 94129

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 17266 SAN FRANCISCO, CA. 94129

Postage will be paid by Addressee:



No Postage
Necessary
if Mailed in the
United States



RIDE SHARING

relieves
congestion,
headache
and
gas pain

Is your commute getting you down? Does stop and go traffic make you tense? Do you arrive to work tired and irritable? Do you get a sinking feeling in your stomach as you watch the dollars click by on the gas pump?

If you have any of these symptoms, take heart. There is a remedy. Ridesharing. Used regularly, ridesharing relieves congestion, headache and gas pain.

You already know that ridesharing saves money, gas and time. But most poolers agree that to commute in a pleasant, relaxed atmosphere, where the needs of both the individual and the group are taken into consideration, is the most rewarding benefit of all.

Golden Gate Ridesharing offers three ridesharing options to commuters in the North Bay: Carpools, Vanpools and Club Buses. Our trained staff is available to help you get started in the ridesharing mode that best suits your needs. Why not give us a call today!



Carpooling is the simplest form of ridesharing. It's just a matter of bringing neighbors together in the same car so they can share the driving and/or expenses.

Golden Gate can provide both "instant" computer carpool matching and printed matchlists to interested commuters. This matching service is made possible through access to the regional ridesharing computer system at RIDES for Bay Area Commuters, Inc. in San Francisco.

Once you've received your matchlist, call the people on it. They are just as anxious to share a ride as you are. If there aren't enough people on your list, or if some of the names are no longer current, call us, we can expand the search area and send you a new list.

When setting up your carpool, you can decide if you want to alternate driving, drive every day or ride every day. Even occasional pooling can work for you. Pools of three or more are entitled to use the express carpool lanes on Highway 101 and cross the Golden Gate Bridge toll free during regular commute hours.



A vanpool is a group of commuters who live and work near each other riding together in a van. The van is driven by one of the commuters who rides free and has personal use of the van in exchange for keeping it clean, well maintained and punctual. A back-up driver relieves the driver during absences.

Vanpools are comfortable, convenient and can save you as much as \$200 per month in commute costs.

Golden Gate provides vans in several sizes and configurations: the economical 12 and 15 passenger Deluxe vans, the 10-passenger Luxury vans with reclining airline-type seats and our elegant Executive model which features reclining swivel-type seats and a roomy center aisle. All models are equipped with front and rear air conditioning, power steering, power brakes, automatic transmission, radio and other comfort features.



GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT

August, 1982

PER PASSENGER MONTHLY VANPOOL RATES

	<u>Roundtrip Mileage</u>	<u>Executive Luxury Van (8 Psgr.)</u>	<u>Deluxe Van (10 Psgr.)</u>	<u>Deluxe Van (13 Psgr.)</u>	<u>Golden Gate Transit Monthly Bus Fare (with discount)</u>
Mill Valley	30	\$52.28	\$43.35	\$33.35	\$ 62.37
Corte Madera	35	54.90	45.71	35.16	75.60
	40	57.53	48.08	36.98	
San Rafael	45	60.15	50.44	38.80	75.60
Terra Linda	50	62.78	52.80	40.62	75.60
Ignacio	55	65.40	55.16	42.43	
Novato	60	68.03	57.53	44.25	88.83
	65	70.65	59.89	46.07	
	70	73.28	62.25	47.88	
	75	75.90	64.61	49.70	
Petaluma	80	78.53	66.98	51.52	102.06
	85	81.15	69.34	53.34	
Cotati	90	83.78	71.70	55.15	102.06
	95	86.40	74.06	56.97	
Johnert Park	100	89.03	76.43	58.79	102.06
	105	91.65	78.79	60.61	
	110	94.28	81.15	62.42	
t. Reyes/Napa	115	96.90	83.15	64.24	
anta Rosa	120	99.53	85.88	66.06	113.40



Dear Ridesharer:

Thank you for registering with Golden Gate's Flex-Pool Program!

As a registered Flex-Pool participant, you are now eligible to use this service. Flex-Pool is available to you and other commuters who live in Marin or Sonoma counties and work in San Francisco. As a ridesharer, you might find yourself occasionally unable to meet your regular vanpool, car-pool or club bus because of an appointment after work or because of work related overtime. For these occasions when you find yourself staying "later than usual" in San Francisco, Flex-Pool is the ideal back-up for you!

Enclosed are your two Flex-Pool cards. Your personalized **I.D. Card** permits to ride Flex-Pool at a *special rideshare fee*. Simply show the driver/coordinator your I.D. Card when boarding the van and pay the special fee. The **Schedule/Fee Card** gives the pre-arranged route, time, and fee for your trip. Keep these two cards in a convenient place to guarantee "back-up" accommodations for those occasions when you are unable to meet your usual ridesharing trip.

To use this service, simply check the schedule to find the stops that are convenient to your work/home location and the fee. Then *make just one telephone call to the Golden Gate Ridesharing office at (415) 921-5858, extension 322 to reserve a seat on Flex-Pool*. This can be done the same day you need a ride. Remember that reservations can be made only until 3:30 pm daily.

If you are unable to call or if you become aware of your delay after 3:30 pm,, just go to the pre-arranged location at the time specified and the Flex-Pool van will stop for you. Please note that we cannot guarantee you a ride on the van without a reservation if it is booked at capacity for the evening.

The Flex-Pool is an easy, safe and convenient way to travel. Now you have flexibility in your schedule and can continue to rideshare too!

Sincerely,

Project Staff
Ridesharing Division



GOLDEN GATE RIDESHARING

BOX 9000, PRESIDIO STATION • SAN FRANCISCO, CA. 94129
(415) 921-5858



**FOR INTER OFFICE USE**

TO: HO Employees

FROM: Mr. Townsend - HO Transportation Services

DATE: March 24, 1980

REFERENCE TO:

SUBJECT: TRANSPORTATION PROGRAM: CARPOOLING

Transportation Services is developing programs to encourage carpooling, vanpooling and buspooling. Our goals are to reduce fuel consumption, unnecessary commuting expense, traffic congestion and air pollution, and to alleviate the shortage of parking at this building.

The first phase of this program - Carpooling - is being implemented on March 24, 1980. It involves two main services:

1. Ride Matching: This service will provide you with a list of employees living near you who share your commute transportation needs. To participate, complete and return the attached Ride Matching form to HO Transportation Services (1-K). To protect your privacy, no home addresses or phone numbers are required on our form.

You may wish to fill out and return a form even if you do not anticipate forming a carpool. The list can be very helpful if your usual means of commute breaks down.

2. Carpool Preferred Parking: To encourage the forming of carpools, we will provide preferred parking in the East lot for carpools of three or more people. From 6:00 a.m. to 9:00 a.m., any car arriving with three or more employees will be permitted to park in this area. After 9:00 a.m., the area will be opened to unrestricted employee parking.

This parking incentive will be open to both existing and newly-formed carpools. If you anticipate parking in this area, please have one member of your carpool call Art Cooke (X2450) so we will have ample space available.

The East lot is on the California Street side of the building, opposite the Security office.

If you have any questions about our services, please feel free to contact Art Cooke.

D. R. T.

RIDE MATCHING FORM COMPLETION INSTRUCTIONS

NAME: Include last, first and middle initials.

WORK INFORMATION: Please provide complete work phone, department (including floor location and normal work hours.

HOME INFORMATION: Obtain HOME MAP LOCATION by locating your home on the maps attached. Enter the coordinates that identify your map location. If your home does not appear on the attached maps, consult the wall map located near HO Transportation Services.

If your home is not on any of the maps, enter the coordinates of the place where your normal commute route enters the maps. You might also wish to enter an ALTERNATE MEETING LOCATION.

If you feel your Home Map Location will not be near others working at Fireman's Fund, or if you are willing to drive to a location away from your home to meet other commuters, enter an ALTERNATE MEETING LOCATION. Again - enter the coordinates of that map location.

Please include ZIP code of your home residence.

COMMUTE INFORMATION: Knowing something about your current commute will help us provide you with the highest quality of service possible. Please complete the Commute Information.

SIGNATURE and DATE complete the form. Return it to HO Transportation Services, 1K.

H.O. COMMUTER RIDE • MATCHING SERVICE

By returning this form, you will receive a list of other H.O. employees commuting here from your neighborhood. People will be identified by work and commute information only. All home information will remain strictly confidential. Completion of this form does not obligate you to join a carpool or vanpool.

PLEASE TYPE OR PRINT

NAME: _____
 LAST FIRST M.I.

WORK INFORMATION

WORK PHONE - DEPARTMENT _____

NORMAL WORK HOURS : HOURS : MIN. A/P TO : HOURS : MIN. A/P

(Example: 08: 30 A to 04: 45 P is 8:30am to 4:45pm)

HOME INFORMATION

HOME MAP LOCATION: -

ALTERNATE MEETING LOCATION: -

HOME ZIP CODE:

Obtain MAP LOCATIONS from the maps
 ATTACHED or from the MAP POSTED
 near H.O. Transportation Services (1K)

COMMUTE INFORMATION

HOW DO YOU USUALLY COMMUTE TO WORK?

- | | |
|---|--|
| 1. ☐ CARPOOL | CARPOOL NUMBER, IF AVAILABLE _____ |
| 2. ☐ VANPOOL | VANPOOL NUMBER, IF AVAILABLE _____ |
| 3. ☐ CLUB BUS | 6. ☐ PUBLIC TRANSIT |
| 4. ☐ DRIVE ALONE | 7. ☐ MOTORCYCLE |
| 5. ☐ DROPPED OFF | 8. ☐ BICYCLE |
| | 9. ☐ WALK |
| | 10. ☐ OTHER |

IN A CARPOOL WOULD YOU PREFER TO: 1. ☐ DRIVE 2. ☐ RIDE 3. ☐ EITHER

IN A VAN POOL WOULD YOU PREFER TO: 1. ☐ DRIVE 2. ☐ RIDE 3. ☐ EITHER

HOW MANY MILES IS IT FROM YOUR HOME TO THE OFFICE (ONE-WAY)? _____

SIGNATURE

DATE

RETURN COMPLETED FORMS TO H.O. TRANSPORTATION SERVICES—1K.

MARIN COUNTY



The following table illustrates potential tax savings an employer could receive through the new California Employer's Ridesharing Incentive Act, along with other tax benefits. These tax savings could be passed on to riders in the form of lower fares at little or no cost to employers. The example shows the results for an employer who either purchases or leases a 1982 twelve-passenger van. The average occupancy of the van is eleven passengers, and the daily round trip is 72 miles, for 21 days per month.

PRO-FORMA CALCULATION OF TAX BENEFITS

Employer Sponsored Vanpool

4 YEARS COSTS BEFORE TAX CREDITS

	PURCHASE	LEASE
Purchase Price / Total Lease Cost	\$ 14,000	\$ 18,700
Interest / Lease Fee ¹	5,000	Included
6% Sales Tax / 6% Users Tax	Included	Included
License	800	800
Administration	4,000	4,000
Insurance	3,800	3,800
Gas	13,200	13,200
Maintenance	3,500	3,500
Total Cash Expended	\$ 44,300	\$ 44,000
Less Resale Value ²	3,200	N/A
Total Costs	\$ 41,100	\$ 44,000

TAX CREDITS

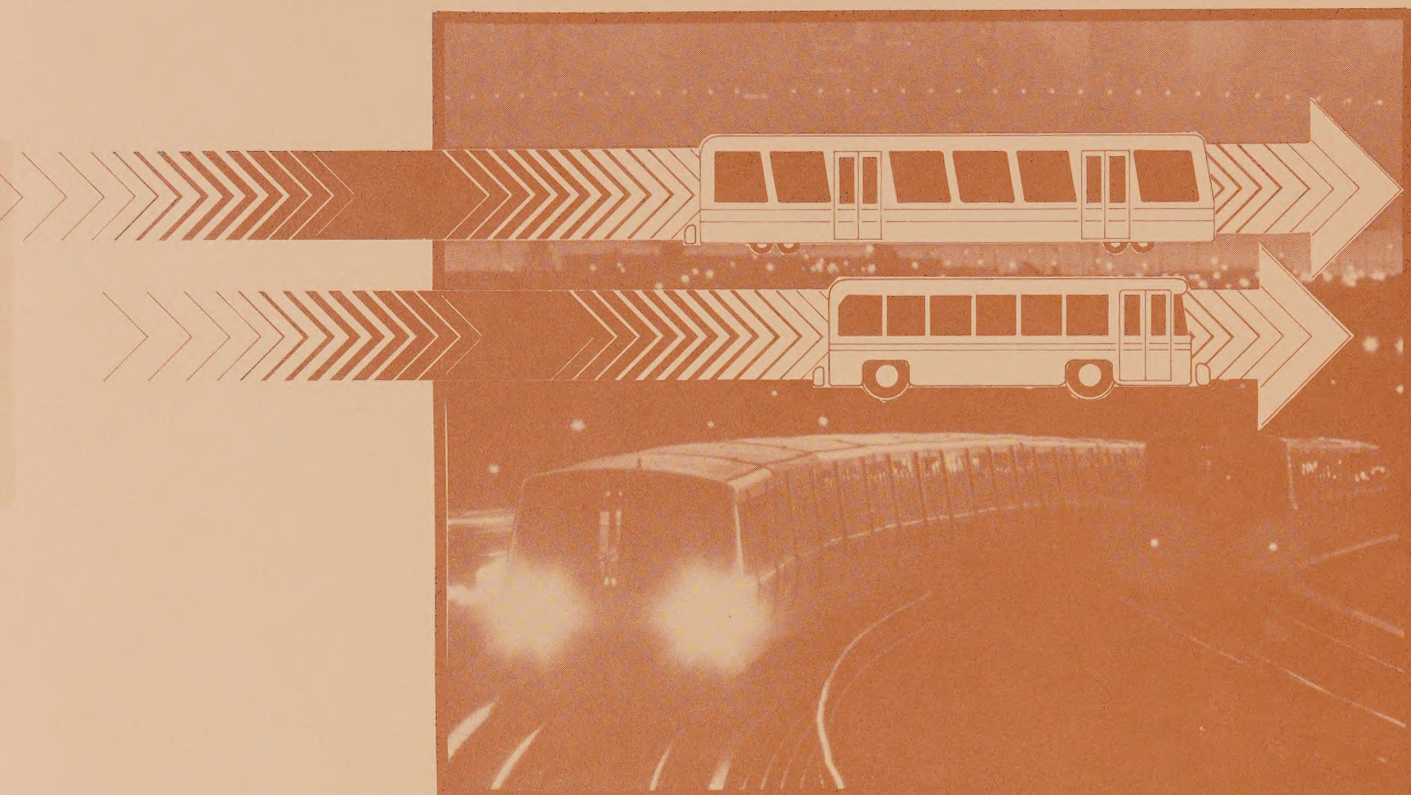
SB 321 Employer's Rideshare Incentive Act (20% of purchase or lease)	\$ 2,800	\$ 3,700
Federal Energy Tax Act of 1978 (10% of purchase or lease)	1,400	1,900
Total Tax Credits	\$ 4,200	\$ 5,600

OTHER TAXES

Income - fares collected	\$ 36,900	\$ 38,400
Less: Operating costs	30,300	44,000
Depreciation	10,800	-0-
	\$ 41,100	\$ 44,000
 Net income (loss)	 \$ (4,200)	 \$ (5,600)
Income tax due	-0-	-0-
Cost Less Tax Credits Plus Applicable Taxes Due	\$ 36,900	\$ 38,400
Total Fares Collected Over Four Years	36,900	\$ 38,400
Net Cost To Employer	\$ -0-	\$ -0-
 Passengers Monthly Fare (assuming 11 riders)	 \$ 70	 \$ 73
 Fare Per Passenger Mile (total fare ÷ miles driver)	 4.6¢	 4.8¢

- Both interest and lease fee are calculated at an 18% annual percentage rate with 100% financing.
- Resale value is expected blue book price in four (4) years. Lease cost includes resale value.

THIS TABLE DOES NOT REPRESENT EITHER FINANCIAL OR LEGAL ADVICE. THESE FIGURES ARE PRESENTED ONLY AS AN EXAMPLE OF POSSIBLE SAVINGS THAT MAY BE ACHIEVED UNDER EXISTING LAWS AND REGULATIONS. ANY QUESTIONS SHOULD BE REFERRED TO YOUR COMPANY'S FINANCIAL OR LEGAL ADVISOR.



The transportation coordinator can encourage transit use by providing information, creating incentives, and seeking improvements in transit service.

CHAPTER 2

TRANSIT

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This chapter discusses transit — both conventional public transit in the Bay Area and publicly and privately provided shuttles to connect transit stops to the work place. The Public Transit section includes an overview of public transit service, a description of what the transportation coordinator can do to promote transit use, and a Bay Area transit service map. The Shuttle section includes examples of successful private shuttles and information for the coordinator on existing public shuttle services, assistance available for developing new shuttles, and the benefits and options for company-provided shuttles.

SUMMARY AND DEFINITION

Public Transit

The San Francisco Bay Area has one of the best public transit systems in the country. It consists of an integrated network of rapid rail transit (BART), commuter rail transit (Southern Pacific), and express and local bus service run by several operators. The cost of public transit is subsidized by federal, state and local tax funds. Although costs are increasing and fiscal resources are becoming more and more limited, the Bay Area transit system is continuing to expand and improve.

Public transit is designed to provide efficient, shared-ride travel at low user cost. It functions best in heavily traveled corridors serving high-density areas. The major downtown employment centers in the Bay Area are well served by transit. But in lower-density urban and suburban areas, employment sites are usually at some distance from a transit station, and bus service is slower because many stops are made to gather passengers.

Shuttles

It is not cost-effective to provide transit service with conventional large vehicles to and from widely dispersed destinations. Shuttle buses are designed to fill this need and provide a convenient connection from a transit station to the work place. These are usually frequently scheduled or demand-responsive van-type vehicles that cover short distances (about one-quarter mile to two miles). Although there are several examples of publicly funded shuttle services in the Bay Area, most of the transit operators are unable to use their limited resources to provide additional shuttle services. Employers are beginning to realize the benefits of individually or jointly sponsoring shuttle connections to nearby transit stations.

Benefits

The development of mass transit in the Bay Area has been essential in preserving the scenic environment, lowering the need for costly automobile facilities such as freeways, bridges and parking structures, and allowing employment growth without additional traffic congestion.

Transit ridership in parts of the region with well-established, frequent transit service also indicates that transit is the chosen alternative for many commuters. Transit frees the commuter from parking costs, parking space availability problems and expensive vehicle maintenance costs. Many transit users find they can do without a car that had been used for commute purposes only. In many areas, especially where parking is difficult to find, commuting by transit is as fast or faster than driving to work. Transit

passengers also have more flexibility and independence than members of other ridesharing groups and enjoy the benefits of being able to work, read or relax while traveling. Commuting by transit is inexpensive; a 20-mile round trip from the East Bay to San Francisco by AC Transit or BART costs about \$630 per year, compared with \$1,900 to \$2,300 when driving alone in a subcompact car. (Cost of owning and operating a subcompact car in 1982. Source: U.S. Department of Transportation, FHWA.). Commuting by transit is also convenient; monthly transit passes or multiple-fare cards are available from all of the region's operators. Several offer the added bonus of allowing unlimited trips at approximately the cost of a normal number of commute trips. Under new state laws, employers who subsidize employee purchase of transit tickets and passes may deduct the subsidy on the state income tax form as an ordinary business expense (see Tables 21 and 22 and in the Administration section).

For several reasons, employers within a short distance of an express, long-distance transit service should consider running a shuttle service. Shuttle services help to realize the benefits of an existing investment in the public transit system and may be less costly than providing parking spaces. Running a shuttle will improve a company's public image and mitigate automobile congestion and neighborhood overflow parking problems. It will also broaden a company's labor market and serve as a tool in recruiting employees. In some instances, shuttles that are used during the peak periods to get employees to and from transit facilities can be used in the off-peak to shuttle employees between various plant/office locations within the company.

PUBLIC TRANSIT

OVERVIEW OF PUBLIC TRANSIT IN THE BAY AREA

Local Commitment

Public transit in the Bay Area has a history of strong local commitment. In the last 25 years, Bay Area voters have supported transit investments and opposed non-complementary highway development. For example:

- In 1959, the San Francisco Board of Supervisors opposed construction of several freeways, thus starting the "freeway revolt."
- In 1962, the voters in three counties passed the largest local bond issue ever when they approved the expenditure of \$792 million dollars to build the BART and Muni Metro systems.
- The region rejected the one-half billion dollar Southern Crossing bridge in 1972. One of the arguments which led to its defeat was that better public transit would relieve congestion on the Bay Bridge.
- In 1974, voters in Fremont and Newark approved a property tax of 33 cents per \$100 assessed valuation for annexation to the AC Transit District.

Currently the total operating cost of transit in the region is approximately \$470 million a year. Of this amount, the majority comes from local sources. Only about 9 percent comes from the federal government; the rest comes from fares and from local and state taxes.

Expanding Service

This investment has provided extensive and expanding transit service throughout the region. Service has increased from 41 million vehicle miles delivered in 1961, to over 120 million miles in 1981. Ridership, which was still declining in the late sixties, is now increasing markedly; it has now reached more than 1.2 million passengers a day, compared to slightly over 600,000 in 1966. Some of the more significant recent improvements in service include:

- **AC Transit**, which has been operating in the East Bay since 1956, has just completed deployment of 175 new lift-equipped buses and is planning to put 216 more into service.
- **BART**, which began operations in 1972, now carries approximately 190,000 passengers a day. The recent improvements in the train control system have allowed closer spacing of trains, resulting in increased capacity to downtown San Francisco and Oakland.
- **San Francisco's Muni** carries over 600,000 riders a day and has noted a steady increase since 1977. Muni has completed phasing in its new light rail service which connects with the downtown BART stations. Muni is also changing its service to a grid route system and adding large capacity "articulated" buses and trolleys to its fleet. The resulting improvements in crosstown and downtown service are expected to result in an increase in systemwide capacity.
- **The Santa Clara County Transit District** was established in 1972 and now operates over 550 vehicles and carries 115,000 passengers a day. A local half-cent sales tax was passed in 1976 which provides \$40-45 million annually as local match for federal funds. The District's plans call for an expanded fleet of 750 buses.

- **The San Mateo County Transit District** (SamTrans) began in 1974 and now operates a fleet of 320 buses and contracts with Greyhound to operate trunkline routes linking San Mateo, San Francisco and Santa Clara counties. The legislation which created SamTrans also enables the District to levy a half-cent sales tax.
- Since 1970, all of the increase in **Golden Gate Bridge** commute trips (from 30,000 to 42,000 a day) has been handled by transit and ridesharing (11,000 bus trips, 1,000 ferry trips, and 6,000 carpool and vanpool trips).
- **The California Department of Transportation** (Caltrans) has negotiated a 10-year service agreement with Southern Pacific that will result in a multimillion dollar investment in the upgrading of SP service, with new equipment, added trains and improved reverse commute service from San Francisco to San Jose (now called Caltrain). The costs of the improvements are to be jointly borne by the three counties served by the Caltrain commute service, Caltrans and the federal Department of Transportation.
- **The Central Contra Costa Transit Authority** has been established to operate a fully integrated transit service in Central Contra Costa County. The several existing contract services in the area have been consolidated, and programming and planning for expansion is beginning.

HOW TO ENCOURAGE PUBLIC TRANSIT USE

Employers can encourage and facilitate transit commuting in several ways.

Provide Information and Assistance

Many employees, especially those who are changing jobs or residences, will try commuting by transit if information on service and routes is readily available. Providing transit maps and schedules, developing a transit guide for the employment site and offering personal trip-planning assistance will promote transit use. Transit information should be a regular part of the package provided to new employees. Transit promotion should also be a regular part of a commute alternatives marketing program (see the Marketing section in the Administration Chapter).

Sell Transit Passes

Selling transit passes at the employment site adds to the convenience of transit, especially if it is done through payroll deduction. In San Francisco in particular, on-site sale of Muni Fast Passes has increased the visibility of transit and company support for transit use. Costs are minimal; they only involve the time spent by someone at the company to handle the transaction. Details of each transit operator's current employer ticket sales program are included in the Appendix.

There are monthly passes available through many transit districts which allow unlimited monthly use. There are also joint monthly passes now being offered for commuters who use more than one transit system. An AC Transit-Muni transbay pass was begun in 1981, allowing unlimited travel on both systems for a month. An intra-San Francisco pass allowing travel on both BART and Muni will be offered early in 1983. A "super-pass" between AC Transit, BART and Muni is currently being planned. Because this pass requires modifying the BART fare gates, it will not be available until 1985. A joint pass which allows Caltrain (Southern Pacific) commuters from the Peninsula to use Muni in San Francisco is being offered on a trial basis (to be continued if sales warrant it).

MTC has applied for federal funding for another important project to begin in 1983. If the grant is awarded, MTC will help develop a "one-stop shopping center" where company coordinators can purchase all the transit system passes to sell at the work

site. Transit information will also be available. For more information, call MTC (see Contacts).

Adopt Alternative Working Hours

The transit system experiences severe peaking; most commuters travel during the same half-hour period each morning and evening. The existing transit fleet could serve more commuters without additional investment if work arrivals and departures were spread over a wider band of time. Instituting flexible or staggered work hours will make more efficient use of the existing transit system and allow employees to travel at a more comfortable or convenient time. (See the Alternative Work Hours Chapter.)

Offer a Transit Subsidy

A number of employers offer a financial subsidy for transit users. In the Bay Area, Shugart Associates in Palo Alto offers free transit tickets to employees; each month, approximately 200 (10 percent) of the employees take advantage of the subsidy. At ROLM Corporation in Santa Clara, employees who purchase three monthly passes get one free pass.

A transit subsidy may be offered permanently to all employees or as a promotion to new employees; for instance, free transit passes for three months to establish a transit habit. When considering a permanent subsidy, it is important to carefully analyze the potential costs and benefits to the company. A permanent subsidy for all employees will be increasingly costly as the program becomes more successful. Possible benefits will be reduced need for parking and a positive public image. Proposals for providing a transit subsidy can be presented in terms of equity, if a company provides free parking for those who drive to work. (See the Parking Management Chapter on the cost of providing "free" employee parking.)

State legislation enacted in 1982 (SB 321) provides an income tax deduction for the cost of transit subsidies. Also under state law, monetary compensation for ridesharing and transit use is nontaxable. Employees who use transit to commute may also deduct \$7 a month for the cost of commuting (see Table 22).

Offer Other Incentives

Other incentives for transit use include the provision of a bus shelter at the work place. This can be done in cooperation with the transit operator and is a permanent advertisement of the company's commitment to transit. (The cost of a bus shelter may be depreciated over a 36-month period under SB 321.) You should also check the access from the transit stops to the buildings to make sure there are adequate sidewalks and no unnecessary barriers.

Marketing incentives include providing transit information, posting maps and promotional materials, including articles in the company newsletter on company support for transit use or profiles of transit users, and sponsoring lotteries or prizes for transit users and other ridesharers.

Work to Improve Transit Service

Employers, through the transportation coordinator, can identify specific transit needs and problems and work with transit operators to plan service improvements. Since transit service does not pay for itself out of the fare box but is heavily subsidized, added service means added costs. It is, therefore, necessary to provide evidence of a potential market for any additions or improvements in service. Results of a transportation survey may provide this evidence. Transit operators each have a five-year plan for transit improvements, which is updated annually. Requests for service will be considered in the context of the five-year plan.

There are several ways to interest transit operators in adding service. One is to begin a shuttle service and demonstrate a reasonable level of usage. Employers in Stanford Industrial Park originated a shuttle service to the Southern Pacific Station that has recently been taken over by the Santa Clara County Transit District as a regular route. (Shuttle service will be discussed in the next section.)

Another way to demonstrate a market for transit service is to set up a charter express-bus service (see Buspools in the Ridesharing Chapter), or make arrangements with an operator to fund a test period of increased service.

In a dense employment area, or in areas of large but dispersed employers, staggered work hours may result in improved transit service. Employers should work closely with transit operators before staggering hours to coordinate service with the new work schedule.

Table 9 summarizes the elements of a company public transit program.

TABLE 9
ENCOURAGING TRANSIT USE

Provide information and assistance:

- Have available transit maps and schedules and information telephone numbers.
- Develop a transit guide to the employment site.
- Offer personal trip-planning assistance.
- Supply transit information to new employees.
- Sell transit passes at the work site.

Adopt alternative work hours. This flexible approach

- eases the crowding problem on transit;
- allows more efficient use of the transit system, increasing capacity at no extra cost;
- allows employees to better schedule their transit/work connections.

Offer a transit subsidy either as a

- permanent subsidy to all employees;
- promotional subsidy for new employees.

Offer other incentives such as

- bus shelters;
- convenient access to the buildings;
- general promotion and recognition of transit use.

Work with transit operators to improve transit service:

- Identify needs and problems.
- Work with transit operators to plan improved service.
- Demonstrate demand for new transit service with shuttles or charter service.
- Work with transit operators to match schedules with staggered work hours.

THE REGIONAL TRANSIT SYSTEM

There are six major operators of public transit service in the San Francisco Bay region: AC Transit, BART, the Golden Gate Bridge, Highway and Transportation District (GGBHTD), San Francisco Municipal Railway (Muni), San Mateo County Transit District (SamTrans) and the Santa Clara County Transit District (SCCTD). In addition, the Central Contra Costa Transit Authority will consolidate and expand bus services in Central Contra Costa County; the Marin County Transit District currently contracts with the GGBHTD to provide local transit within Marin County; and there are several, smaller, city transit operations within the region — notably, Santa Rosa Transit and Vallejo Transit. Caltrain (formerly Southern Pacific) provides commuter rail service between San Jose and San Francisco. The Red and White Fleet offers a private commuter ferry service between Tiburon and the San Francisco Ferry Building. Transportation for the handicapped is provided by paratransit services operated by private or public agencies and subsidized taxi service in some cities. These services are usually wheelchair-accessible and provide door-to-door transportation within their service areas by appointment.

The Regional Transit Association, a cooperative organization of the six largest Bay Area transit systems, is letting the public know that it is possible to travel throughout the Bay Area using a mix of transit systems. These activities focus on placing Regional Transit Connection signs at main transfer points throughout the region, along with developing a map showing all the transit operators. This map, inserted following this section, shows each of the transit system service areas. Transit information telephone numbers are included on the back of the map.

MTC has also published a *Regional Transit Guide* which is an excellent guide to intersystem transit trips. It provides information on transit connection points, fares, frequency of services and how to get to a specific destination. Information on all major transit operators and many smaller services is included. The Guide is available from MTC for \$2. If you order five or more copies, a discount rate of \$1 per copy is available. Chinese and Spanish translations will also be available. (See the Contacts section for more information.)

For more information on transit, call the people listed in the Contacts list at the end of this chapter. They will be glad to help familiarize you with transit serving your work location, provide schedules and maps for distribution, and help you set up a transit marketing or incentive program.

REGIONAL TRANSIT CONNECTION



KEY TRANSIT LINES & CONNECTION POINTS FOR THE BAY AREA

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Use this map to find key public transit routes connecting your point of departure with a desired destination. Transit systems are identified in the box below. Connection points between transit lines are indicated by "C" symbols.

REGIONAL TRANSIT...make the connection.

KEY

- | | |
|---|--|
|  AC Transit |  Golden Gate Transit |
|  BART |  MUNI |
|  BART Express Bus |  SamTrans |
|  Caltrans Peninsula Train |  Santa Clara County Transit |
|  Golden Gate Ferries |  Connection Point |

San Francisco

San Francisco Connection Points



- San Francisco Ferry Building
- Embarcadero BART/MUNI Station
- Montgomery St. BART/MUNI Station
- Caltrans Transbay Terminal
- Powell St. BART/MUNI Station
- Civic Center BART/MUNI Station
- Southern Pacific/Caltrans Peninsula Train Depot



Pacific Ocean

KEY TRANSIT LINE DESCRIPTIONS

Use this information for general reference only. For more specific information, consult maps of individual transit systems or call one of the information numbers listed below.

Additional copies of this map are available from any local transit system listed below.

GENERAL INFORMATION

The indicated key transit lines provide the fastest, most direct service between major Bay Area centers of commerce and points of interest. Each line operates weekdays at least every 60 minutes (often at least every

30 minutes) from 7 a.m. to midnight. Some late night and weekend schedules may be severely restricted or nonexistent. Call transit information in your area for complete schedules.

For additional information on traveling to Bay Area points of interest, obtain a copy of the Regional Transit Guide, published by the Metropolitan Transportation Commission, (415) 849-3223, and sold in many locations.

AC TRANSIT

- A Between 12th St. BART/Oakland and Transbay Terminal via W. Grand.
- N Between San Leandro BART and Transbay Terminal via MacArthur Blvd.
- 40/43 Between Bayfair Shopping Center and North Berkeley BART via Berkeley BART, Ashby BART and MacArthur BART stations.
- 51/58 Between High St./Alameda and Berkeley Marina via Berkeley BART, University of California and Rockridge BART stations.
- 57 Between Oakland Airport and Ashby Ave./North Oakland and Emeryville Marina via MacArthur BART and Coliseum BART stations.
- 70/70A Between El Cerrito via El Cerrito BART and El Cerrito del Norte BART stations and Richmond, San Pablo and (weekdays) Hercules, Rodeo and Crockett.

BART TRAINS

- Between Fremont and San Francisco/Daly City.
- Between Richmond and Fremont via Oakland City Center–12th St.
- Between Richmond and San Francisco/Daly City via Oakland City Center–12th St.
- Between Concord and San Francisco/Daly City via Oakland City Center–12th St.

BART EXPRESS BUSES

- D Between Martinez and Dublin via Walnut Creek BART.
- U/L Between San Leandro/Bay Fair Station BART and Livermore.
- P/X Between Concord BART and Brentwood/Oakley.
- U Between Hayward BART and Livermore.
- P Between Concord BART and Antioch.
- M Between Concord BART and Martinez.
- J Between El Cerrito BART and Rodeo.
- Q Between El Cerrito BART and Pinole.

CALTRANS PENINSULA TRAIN

Train service between San Francisco and San Jose, with stops at key locations in San Mateo and Santa Clara Counties.

GOLDEN GATE TRANSIT

- Ferries**
- Depart Sausalito and Larkspur; arrive S.F. Ferry Terminal, located behind south wing of S.F. Ferry Building. (Limited schedules.)
- Buses**
- 50 Between San Marin/Novato and San Francisco Transbay Terminal via Hwy 101, San Rafael and S.F. Civic Center.
 - 70 Between Santa Rosa and San Francisco Transbay Terminal via Hwy 101, Rohnert Park, Cotati, Petaluma Depot, Novato, San Rafael and S.F. Civic Center.
 - 10 Between Tiburon and San Francisco via Hwy 101.
 - 20 Between San Anselmo and San Francisco via Hwy 101.

MUNI

- Bus**
- 38 Between Fort Miley or 48th at Point Lobos or Cabrillo at Great Highway and Transbay Terminal via Geary.

MUNI Metro Service

- J* Between 30th Street at Church and Embarcadero Station via Church and MUNI Subway.
- K* Between Balboa Park Station and Embarcadero Station via Ocean and MUNI Subway.
- L* Between 46th Avenue at Wawona and Embarcadero Station via Taraval and MUNI Subway.
- M* Between Balboa Park Station and Embarcadero Station via 19th Avenue and MUNI Subway.
- N* Between Great Highway at Judah and Embarcadero Station via Judah and MUNI Subway.

*Weekend service arrives Transbay Terminal via Market Street surface tracks.

SAMTRANS

- Bus Service**
- 5L Between Palo Alto and Daly City BART via El Camino.
 - 5M Between Hillsdale/San Mateo and downtown San Francisco via El Camino and Mission Street.
 - 7B Between Redwood City and S.F. Airport via San Mateo and California Drive; arrives downtown San Francisco via Airport Boulevard and Bayshore.
 - 7F Express between Palo Alto and S.F. Airport and downtown San Francisco.
 - 3B Between Stonestown and Daly City BART and S.F. Airport via Hwy 280.
 - 1A/1H Between Daly City BART and Half Moon Bay via Skyline/Pacifica.
 - 90E Between 1st & B/San Mateo and Hayward BART via El Camino and Hillsdale. (Weekday commute service only.)
 - 90H Between Hillsdale Drive/San Mateo and Half Moon Bay via Hwy 92. (Restricted service Monday through Saturday. No Sunday service.)

SANTA CLARA COUNTY TRANSIT

- Bus Service**
- Between Eastridge and Southern Pacific depot/Menlo Park via El Camino.
 - 68 Between Gavilan College/Gilroy and 2nd & St. James/San Jose via Monterey Hwy.
 - E180 Between Amtrak/Southern Pacific Station/San Jose and Fremont BART. Some trips originate from Los Gatos.
 - E140 Between Fremont BART and downtown Sunnyvale via Marriott's Great America.

TRANSIT INFORMATION TELEPHONE NUMBERS

- AC TRANSIT calling from:**
- Oakland & San Francisco Area 653-3535
 - Hayward Area 582-3035
 - Richmond Area 232-5665
 - Hearing Impaired (TTY) 428-2266
- BART calling from:**
- Fremont/Union City Area 793-2278
 - Hayward/San Leandro Area 783-2278
 - Livermore/Pleasanton Area 462-2278
 - Oakland/Berkeley/Orinda Area 465-2278
 - Richmond/El Cerrito Area 236-2278
 - San Francisco/Daly City 788-2278
 - San Bruno Area 873-2278
 - Lafayette/Walnut Creek/Concord Area 933-2278
 - Antioch/Pittsburg Area 754-2278
 - Hearing Impaired (TTY) 839-2220
- CALTRANS PENINSULA TRAIN calling from:**
- San Francisco 495-4546
 - South San Francisco 588-0852

- Millbrae 697-4673
 - Burlingame 343-2783
 - San Mateo 344-7607
 - Redwood City 366-3821
 - Palo Alto 323-6105
 - Sunnyvale 736-4911
 - Santa Clara 243-9036
 - San Jose 297-4561
- GOLDEN GATE TRANSIT calling from:**
- San Francisco and Southern Marin Area 332-6600
 - Marin County 453-2100
 - Sonoma County 544-1323
 - Transbay Terminal Lift receiver
 - Hearing Impaired (TTY) 453-8973
- MUNI calling from:**
- All Areas 673-MUNI (6864)
- SAMTRANS calling from:**
- South San Mateo County 367-1500
 - Central San Mateo County 348-8858
 - North San Mateo County 871-2200

- Half Moon Bay/Coastside Area 726-5541
 - San Francisco 761-7000
 - Hayward Area 582-1500
 - White Courtesy Phone, San Francisco Airport 6-2150
 - Transbay Terminal Courtesy Phone Press button
 - Hearing Impaired (TTY) 343-3222
 - BART/Daly City Courtesy Phone Lift receiver
- SANTA CLARA COUNTY TRANSIT calling from:**
- Campbell, Milpitas, San Jose, Santa Clara, Saratoga Area 287-4210
 - Los Gatos, Monte Sereno 354-3050
 - Cupertino, Sunnyvale, Mountain View, Los Altos, Los Altos Hills, Palo Alto Area 965-3100
 - Morgan Hill, San Martin, Gilroy Area 683-4151
 - Hearing Impaired (TTY) 299-4848

SHUTTLES

SUCCESS STORIES IN SHUTTLE SERVICE

There are several examples of privately developed or cooperative private/public shuttles operating in the Bay Area. For example:

Stanford Industrial Park

This shuttle between the Stanford Industrial Park and the Southern Pacific Station was initiated by several companies in the Santa Clara County Manufacturing Group and cooperatively sponsored by the city of Palo Alto. Service during FY 1979-80 cost about \$52,000 (\$4,000 per month), and moved an average of 90 passengers a day. The program was coordinated through the Stanford Industrial Park Transit Advisory Committee. On July 1, 1980, Santa Clara County Transit took over the service and incorporated it into the regular route system.

Oakland "Pill-Hill" Shuttle

Administrative Hospital Services, Inc. (AHSI), is a non-profit administrative coordinating agency jointly owned and operated by four hospitals in Oakland's "Pill-Hill" area. AHSI is currently running a shuttle between the MacArthur BART Station and the hospitals. The vans are leased from RIDES, and part-time drivers operate them during shift changes (6-9 a.m., 2-6 p.m., 9:45 p.m.-midnight). The service has operated since the summer of 1979 and presently carries about 95 passengers a day. A 15-cent fare is charged with pre-purchased tickets; cash fare is 25 cents. The shuttle also transports shared educational equipment between the four hospitals. It is also used to provide transportation for outings and meetings of "special medicine" patients. The shuttle has thus significantly expanded the hospitals' capacity for internal communications and special medical treatment.

Children's Hospital, San Francisco

Conventional transit service from the southeast portion of San Francisco to Children's Hospital, St. Mary's Hospital and Marshal Hale Hospital is poor. Trip times are lengthy, and several transfers are involved. The Municipal Railway agreed that transit service should be improved, but explained that it would take several years, due to the timing of the five-year plan, for overall citywide improvements in service. In the meantime, Children's and Marshal Hale were under neighborhood pressure to lower the number of employees driving to work. As a result, the "Fog Cutter" shuttle service was developed from 16th Street and Bryant to these two hospitals. St. Mary's, located on the route of the shuttle, later joined the service. Two contracted vehicles provide five hours of service daily, divided between the morning and afternoon rush hours. The shuttle connects with a BART station, several bus lines and a park-and-ride lot. At present, 114 passengers a day use the service, which costs \$4,270 per month. Riders must purchase 10-cent coupons. The deficit is funded according to the percentage of passengers each institution generates.

Chevron, Concord

Chevron in Concord has contracted since December 1981 with a private operator to provide transportation between the Concord BART station and its Diamond Boulevard site. There are seven runs between 6:25 a.m. and 8:15 a.m., and eight runs from 3:35 p.m. to 5:30 p.m. Approximately 100 people a day use the free service.

Lawrence Berkeley Laboratory

Lawrence Berkeley Laboratory is situated at the top of a very steep hill about two miles away from downtown Berkeley. Several factors encouraged the Lab to begin shuttle service: access to the site is difficult; parking is limited; and many employees do not own cars and live within four miles of the work site. One to two shuttle buses run from downtown Berkeley (near convenient BART and AC Transit transfer points) to the Lab entrance. The service operates from 6:40 a.m. to 7:00 p.m. five days a week. Each round trip takes 20 minutes and the service is free to all riders. These large buses have 25 passenger seats and can take 15 additional standing passengers. The shuttle carries an average of 1,300 passengers per day.

Once the riders have been dropped off at the Laboratory's entrance, they take one of four smaller minibuses to their destination point. These 17-seat buses may run 80 miles a day over steep terrain; they provide an average of 650 rides a day.

Humphrey Go-BART, Berkeley

Finally, mention should be made of the BART/University of California, Berkeley shuttle. Although the shuttle originally received a subsidy from BART, it is now fully supported by the University. Heavy service is provided from 7 a.m. to 7 p.m., with additional late-night service. Estimated patronage tops 4,000 riders daily at peak school times, and the annual cost of about \$200,000 is primarily supported by campus parking fines.

PUBLIC SHUTTLE SERVICES

Several shuttle services are available to the general public. Employers in areas served by these shuttles can provide information and promote these services. Descriptions of shuttle service should be provided in new employee information packages. Existing services are:

Oakland AirBART

In Oakland, the AirBART shuttle runs from the Coliseum BART Station to the airport — carrying about 7,000 to 10,000 passengers per month. It operates from 6 a.m. to midnight, six days a week and 9 a.m. to midnight on Sunday. The deficit of \$11,000, after fares, is subsidized by the Port of Oakland (which operates the airport) and MTC.

El Bartito

This is a shuttle service operated between BART and the Hayward-Alameda County Government Complex. This free service runs from 7:30 a.m. to 6 p.m., five days a week, and is funded through MTC. A recent month's survey showed 8,000-9,000 passengers, an average of 365 per day, at a monthly cost of \$7,000 to \$8,000.

Loma Ranger

BART introduced shuttle service two years ago in the hilly area around the Glen Park BART Station in San Francisco because there is no parking available and the hills restrict the use of Muni buses. The shuttle now has 180-200 passengers a day. A contractor provides one van for five hours of service a day, at a cost of \$232 a day. The service requires a Muni/BART transfer or a Muni Fast Pass.

Humphrey Go-BART

This previously mentioned shuttle, initiated with public funding and now primarily supported by campus parking fines, provides a convenient connection from the downtown Berkeley BART Station to the various parts of the University of California, Berkeley, campus.

Downtown Oakland Shuttle

AC Transit began a shuttle service in downtown Oakland in 1980. The shuttle runs on weekdays between 7:00 a.m. and 6:30 p.m. in the area between 20th Street and Jack London Square, and Broadway and Lake Merritt. The fare is 25 cents; transfers are accepted from regular AC Transit services or BART but are not issued on the shuttle. Buses run every 10-15 minutes. The minibuses are specially designed with musical instrument graphics, bus stops are indicated with signs bearing musical notes, and buses play a muted musical signature when approaching a stop.

ESTABLISHING PRIVATELY FUNDED SHUTTLES

Benefits

Although running a shuttle service to a transit station may be considered costly (usually approximately \$2,000 a month for one vehicle operating in the peak periods), there are several reasons to consider this transportation alternative:

- Providing shuttle service allows a company to realize the benefits of an existing investment in public transit. Taxes help support BART, Southern Pacific and express bus services; yet, if bus connections do not exist, employees beyond walking distance do not benefit.
- Running a shuttle service may be less expensive than providing parking spaces and may free company land for purposes other than parking.
- If the company is located in a congested area, or if employee parking on neighborhood streets is causing a problem, a shuttle may be an important element of a plan to reduce auto trips to the work site.
- A shuttle connection may serve as a mitigation measure that allows a company to expand.
- A convenient shuttle will serve as a recruitment tool, and broaden the company's labor market.
- Shuttle service might be part of a relocation plan in areas where property nearer transit stations is more costly.
- Running a shuttle can improve a company's image and gain positive publicity. A company van is a highly visible sign of a company's concern for the environment, energy resources and its employees' well-being.
- The shuttle may establish a demand for new public transit service.
- Off-peak shuttle service between plant/office locations can result in cost savings.

Resources

Since public funds are limited, most Bay Area transit operators or public agencies cannot provide or subsidize extensive shuttle services. Two exceptions are BART and the Santa Clara County Transit District; both may cooperate with shuttle efforts in order to gain additional ridership.

BART is actively seeking possible shuttle connections. BART staff is available to assist in planning and implementing a shuttle. This assistance could include assessing the feasibility of a shuttle, identifying options and costs, providing names of qualified private shuttle operators, and recommending various operating details such as routes, schedules and service hours. The following material on shuttle options and costs is taken almost entirely from a BART paper, "General Employee BART Shuttle Information."

Santa Clara County Transit District is expanding its bus service and may be able to provide shuttle service where needed. Contact the BART and SCCTD people listed at the end of this section for information on the possibilities of establishing a shuttle. In other areas, the local public bus operator should be contacted to determine if the desired service can be provided.

Description of a Typical Shuttle

The typical employee shuttle might consist of a 15-passenger van operating for four hours each weekday, during peak commute or shift-change periods. The shuttle would operate directly between the work place and the nearby mass transit stops every 15 minutes. A fare of about 25 cents one way is typically charged. Usually the employee purchases a monthly pass or a monthly coupon book of tickets, eliminating cash fare collection, handling and security problems. Tickets are sold by the employer. Alternatively, the employer can provide the service free of charge.

Options

There are several ways to provide a shuttle service, including:

- using a company vehicle;
- leasing a van through RIDES for Bay Area Commuters, Inc.;
- contracting with a private company to provide the complete service.

Each of these options has advantages and disadvantages that should be carefully examined by each employer.

Cost

The total cost of the typical shuttle described above will depend upon a number of factors, including the operating option selected and the level of service provided. The cost to the employer will be reduced by the amount of fares collected, if any.

The total cost of leasing a van through RIDES and hiring a part-time driver is about \$1,500 per month. A private contractor can provide the entire shuttle service (including driver, vehicle, maintenance and fuel) for about \$2,000 a month.

Costs for an employer to operate its own shuttle service will vary widely, depending upon whether an existing company van is used or a new van is purchased. A new 15-passenger shuttle van costs about \$15,000 to \$18,000. Under this option, the monthly cost to provide the typical shuttle service, not including the capital cost of the van, is about \$1,100. Employers may claim a 20 percent state tax credit for the cost of purchasing or leasing a vehicle in addition to a 10 percent federal income tax credit (see Table 21 and the Appendix of the Administration Chapter).

Details on each of the options follow.

Option 1: Lease a Van Through RIDES

Description

- Employer leases 15-passenger van from RIDES.
- Employer is directly responsible for all aspects of the shuttle service, including hiring and supervising the driver, operating the service, and providing fuel and maintenance services.

Advantages of This Option

- Comparatively low cost for vans and insurance.
- Flexibility (vans can be leased on a month-to-month basis).
- Vans are immediately available.

Cost/Revenue

The total cost of providing a one-van shuttle for four hours each day under Option 1 (RIDES van) is about \$1,553 a month. Assuming 25 daily round trip passengers, shuttle fares will contribute about \$263 a month or 17 percent of the total cost, leaving a total net cost of \$1,290 a month. A breakdown of estimated shuttle costs and revenues is presented in Table 10.

TABLE 10
COST/REVENUE OF SHUTTLE OPTION 1:
LEASE A VAN THROUGH RIDES

• Cost:	
Fixed Cost:	Per Month
basic lease of van	\$ 349
insurance	65
annual registration (year one)	14
RIDES contingency fund	12*
	\$ 440
Variable Cost: (Assuming 100 miles per work day)	
maintenance (100 miles x 21 days x \$0.11 per mile)	\$ 231
gasoline (100 miles x 21 days x \$0.14 per mile)	294
labor cost (assumes P/T employee \$5.00/hour, 4 hrs./day, 21 days/month)	420
administrative overhead @40% of labor	168
	\$ 1,113
Total Monthly Cost of Operation	\$ 1,553
• Revenue: (assuming 25 daily round-trip passengers)	
employee fares (25 employees x 21 days x \$0.50/day)	\$ 263
• Net Cost to Employer (per month)	\$ 1,290

* covers unanticipated vanpool fleet costs, such as insurance deductions and major repairs.

Option 2: Contract With a Private Shuttle Operator

Description

- Employer contracts with a private operator to provide the complete shuttle service.
- BART can supply the name of several private operators in the Bay Area and provide general assistance in the start-up of a shuttle.
- The contract can specify any convenient contract period, and can provide for termination of service on 30 days' notice.
- The contract may have a clause which states that a certain amount will be deducted from the billing for each instance of schedule variance; the service should be monitored.

Advantages of This Option

- A qualified private contractor provides the complete service (employer does not have to worry about service details and operating problems).

Cost/Revenue

The exact costs of this option will vary depending on the individual contractor, but can be estimated based on the cost of current shuttle operations.

It is estimated that a private contractor could provide a one-van shuttle service operating four hours each day during peak periods for about \$2,000 per month. However, the fare revenue (assuming 25 daily round-trip shuttle riders) will amount to \$263 a month, or about 13 percent of total operating expenses. The net cost to the employer would then be about \$1,737 a month.

Option 3: Use a Company Vehicle

Description

- Employer uses a company vehicle to provide service.
- Employer is responsible for all aspects of the shuttle service.
- If the company doesn't have an extra van available for the shuttle service, the cost for a new van is about \$15,000 to \$18,000.
- Typically, either a part-time driver or an existing employee would operate the shuttle.
- The driver will need a California Class 2 license to drive a 15-passenger van. This requirement will be dropped after January 1, 1983.
- The company's insurance premium may increase. Contact your insurance company for details.

Advantages of This Option

- Van is available for other company uses during non-service hours.
- Employer may be able to use an existing company vehicle (not necessarily a van).
- Lowest overall cost of the available options (if vehicle purchase is not necessary).

Cost/Revenue

The total net cost to the employer for providing a one-van shuttle for four hours each day under Option 3 is about \$887, as shown on Table 11.

TABLE 11
COST/REVENUE OF SHUTTLE OPTION 3:
USE A COMPANY VEHICLE

• **Cost:**

Fixed Cost*:	Per Month
insurance	\$ 65
annual registration	14
	\$ 79
Variable Cost: (assuming 100 miles per work day)	
maintenance (100 miles x 21 days x \$0.11 per mile)	\$ 231
gasoline (100 miles x 21 days x \$0.14 per mile)	294
labor/cost (4 hrs./day x 21 days x \$5/hr.)	420
administrative overhead @40% of Labor	168
	\$ 1,113
Total Monthly Cost of Operation	\$ 1,192

• **Revenue:**

(assuming 25 daily round-trip passengers)	
employee fares (25 employees x 21 days x \$0.50/day)	\$ 263

• **Net Cost to Employer (per month)** **\$ 929**

* assumes company owns van already

Other Considerations

There are several factors to consider besides cost in deciding whether to implement a shuttle service — including company characteristics and the transportation situation. These factors are summarized on Table 12.

TABLE 12
CONDITIONS FOR CONSIDERING SHUTTLE SERVICE

- **Transit does not provide direct connections** to the work facility, but long-distance, express service terminals are nearby (one-quarter to two miles). The local bus operator has no immediate plans to offer connecting service.
- **A high percentage of workers live in a transit-served area**; an employee survey indicates that a substantial number of them would be interested in utilizing a shuttle.
- **Your company needs to reduce the number of people driving** to work; public pressure to reduce auto trips is increasing; there are limited parking facilities on site; there is a planned expansion of your work force.
- **Your company is concerned about its public image** and wishes to advertise its commitment to helping solve transportation and energy problems.
- **Your company has trouble finding a labor market** nearby and wishes to offer a benefit to aid employee recruitment and retention.
- **Your company has sufficient funds** to support a shuttle service or can share costs with nearby sites — or government can provide some subsidy; you can demonstrate that shuttle services are cheaper in the long run than added parking facility costs.
- **You have a commitment from your local transit operator** to take over service if sufficient patronage is generated or you are prepared to continue supporting the service.
- **Your company has an existing or planned shuttle** service between plants and offices.

How to Implement a Shuttle Service

The following describes the steps that are typically taken in implementing a shuttle service. If you are considering a shuttle to BART, a BART staff person is available to assist in these steps, as needed (see the Contacts list). The steps are as follows:

1. Conduct Employee Survey

Determine the travel characteristics of your employees by asking them to fill out a simple survey form. (See the sample shuttle survey in the Appendix.)

2. Estimate Shuttle Ridership

Estimate the number of employees likely to use the shuttle based on results of the survey. As a general rule-of-thumb, it is reasonable to expect that 25 persons would use a successful van shuttle operating four hours each weekday. Assume that perhaps one-third of those showing interest will actually ride the shuttle.

3. Estimate Vehicle Capacity

Estimate the approximate vehicle capacity (size and number of vehicles) needed to provide the service. This is done by first estimating the round-trip travel time between the transit stop and the work site (including loading time). Second, estimate the maximum number of shuttle patrons *normally* arriving at, or departing, work during a period equal to the round-trip travel time estimated earlier. This will give you the number of passengers that must be accommodated in a given time period. As a general guide, the shuttle should provide service every 10-15 minutes to be attractive.

4. Choose the Appropriate Shuttle Option

Select the desired option for providing the vehicle and driver based on such considerations as cost and the availability of company drivers, vehicles and shuttle supervisors.

5. Identify Service Details

Identify a specific shuttle route and schedule, and determine how fares (if any) are to be collected. The easiest fare collection method is for the company to design and sell a monthly pass or a monthly book of trip coupons for passage on the shuttle.

6. Design and Conduct a Promotion Campaign

It is extremely important to continuously market the service as one would any other consumer product. The marketing effort need not be expensive, and can make use of company newspapers, bulletin boards and flyers distributed with employee paychecks.

As additional incentive, employees can be provided with free shuttle tickets during the initial promotion period. Another incentive is to sell public transit tickets at the work site.

7. Monitor Patronage and Service

Shuttle ridership should be monitored on a regular basis to determine if any service changes are necessary. Especially if a contract service is used, schedule adherence should also be monitored to make sure the contract is adhered to.

CONTACTS: PUBLIC TRANSIT

Transit Operators

- **AC Transit** – Customer Services
508 16th St.
Oakland, CA 94612

Route maps and schedules; ticket information:

(415) 891-4883 (small volume)
Billy Bishop (large volume)
(415) 891-4704

Ticket arrangements: Jim McCracken, Treasury Supervisor
(415) 891-4771

Promotional materials: Marketing Dept.
(415) 891-4873

Route changes: Don Larson, Manager of Research and Planning
(415) 891-4835

Schedule changes: Warren Robinson, Transportation Engineer
(415) 891-4735

Transit information: San Francisco/Oakland (415) 653-3535
Hayward (415) 582-3035
Richmond (415) 232-5665
Fremont/Newark (415) 797-6811
Concord/Pleasant Hill/Moraga (415) 938-7654
Hearing Impaired TTY (415) 465-5295

- **BART** – Passenger Service
800 Madison St.
Oakland, CA 94607

Route map, schedules, brochures on the system:

Kay Springer, Manager of Passenger Services
(415) 465-4100, ext. 535

BART fare card sales: Kay Springer, Manager of Passenger Service
(415) 465-4100, ext. 535

Starla Bahem, Passenger Service Representative
(415) 465-4100, ext. 510

Transit information: Fremont Union City (415) 793-BART
Hayward/San Leandro (415) 783-BART
Livermore/Pleasanton (415) 462-BART
Oakland/Berkeley/
Orinda (415) 465-BART
Richmond/El Cerrito (415) 236-BART
San Francisco/
Daly City (415) 788-BART
South San Francisco/
San Bruno (415) 873-BART
Lafayette/Walnut
Creek/Concord (415) 933-BART
Antioch/Pittsburg (415) 754-BART
Hearing Impaired TTY (415) 839-2220

- **Golden Gate Transit** – Public Information
Box 9000, Presidio Station
San Francisco, CA 94129
Route maps, schedules, ticket sales:
Bruce Selby, Manager of Public Information
(415) 457-3110
Changes in service: Jerome Kuykendall, Director of Planning
(415) 457-3110
Transit information: San Francisco (415) 332-6600
Marin County (415) 453-2100
Sonoma County (707) 544-1323
Hearing Impaired TTY (415) 453-8973
- **San Francisco Municipal Railway (Muni)** – Department of Public Information
949 Presidio Ave., Room 231
San Francisco, CA 94115
Route maps and information:
Nicolas Fink, Department of Community Affairs
(415) 558-2301
Schedules and changes: Nicolas Fink, Department of Community Affairs
(415) 558-2301
Changes in service: Peter Straus, Director of Planning
(415) 558-5284 or 558-5441
Monthly Fast Pass sales: Ralph Bryant, Fare Collection Receival
(415) 558-2001
General information: Alan Siegal, Chief of Transit Information
(415) 558-3423
Transit information: General (415) 673-MUNI
Hearing Impaired TTY (415) 558-2337
- **San Mateo County Transit (SamTrans)** – Consumer Services
400 S. El Camino
San Mateo, CA 94402
Route maps, schedules, general information:
Aubrey Lumley, Manager of Consumer Services
(415) 573-2343
Service changes: Al Cianfici, Director of Planning
(415) 573-2252
Tickets (all arrangements):
Aubrey Lumley, Manager of Consumer Services
(415) 573-2343
Transit information: North County (415) 871-2200
Central County (415) 348-8858
South County (415) 367-1500
San Francisco (415) 761-7000
Half Moon Bay/
Coastside (415) 726-5541
Hayward Area (415) 582-1500
Hearing Impaired TTY (415) 343-3222
- **Santa Clara County Transit** – Customer Services
1555 Berger Drive
San Jose, CA 95112

Route maps, schedules, general information:

Customer Reps
(408) 299-4141

Service changes: Jim Lightbody, Senior Transit Engineer
(408) 299-4901

Ticket sales: Pauline Mann, Accountant
(408) 299-3713

Transit information: North County/
Palo Alto Area (415) 965-3100
Central County/
San Jose Area (415) 287-4210
South County (415) 683-4151
Hearing Impaired TTY (415) 299-4848

- **Southern Pacific Railroad/Caltrain** – Caltrans
P.O. Box 7310
San Francisco, CA 94120

Transit information: San Francisco (415) 495-4546
South San Francisco (415) 558-0852
Millbrae (415) 697-4673
Burlingame (415) 343-2783
San Mateo (415) 344-7607
Palo Alto (415) 323-6105
Sunnyvale (408) 736-4911
Redwood City (415) 336-3822
San Jose (408) 297-5426

Changes in service: Cecil Smith,
Caltrans District 04 (415) 467-0594

- **Red and White Fleet (Tiburon ferry service)** – Pier 41
San Francisco, CA 94133

Transit information: (415) 546-2815

Changes in service: Sales Manager (415) 546-2856

- **Caltrans Commuter Bicycle Shuttle**

Schedules and other information:

Jack Allen
Bicycle Coordination Unit
P.O. Box 7310
San Francisco, CA 94120 (415) 557-1611

Regional Transit Guide

- **Metropolitan Transportation Commission (MTC)**

Public Information Office
Hotel Claremont
Berkeley, CA 94705
(415) 849-3223

Bulk order (make check payable to MTC):

<u>No. of Copies</u>	<u>Mail Orders (includes tax, postage & handling)</u>
5	\$ 7.50
10	13.25
20	25.00
30	36.75
40	48.75
50	60.50
100	118.00

Regional Transit Connection Map

- MTC, Public Information Office (see above)

Regional Transit Service, Pass and Information Coordination

- Metropolitan Transportation Commission (MTC)
Brett Berrier, Coordinator, Regional Transit Association
(415) 849-3223

Company Transit Subsidy Programs

- ROLM Corporation
Charlene Rottler, Ridesharing Coordinator
4900 Old Ironsides
Mail Stop 461
Santa Clara, CA 95050
(408) 496-0550 x 5241
- Shugart Associates
Judy Fisher-Echols
475 Oakmead Parkway
Sunnyvale, CA 94086
(408) 733-0100 x 2303

CONTACTS: SHUTTLES

Public Shuttle Services

- Oakland AirBART, El Bartito, and Loma Ranger
Call the BART transit information number
- AC Transit Downtown Shuttle
Call the AC Transit information number
- Humphrey Go-BART
Peter Smith, Shuttle Services Manager
University of California, Berkeley
1952 Oxford
Berkeley, CA 94720
(415) 642-5149

Resources

- BART
Jim Evans
800 Madison Ave.
Oakland, CA 94607
(415) 465-4100, ext. 487
- RIDES for Bay Area Commuters, Inc.
Charna Staten, Executive Director
100 Van Ness Ave., 19th Floor
San Francisco, CA 94102
(415) 861-POOL
(408) 996-POOL
- Santa Clara County Transit
Jim Lightbody, Senior Transit Engineer
1555 Berger Drive
(408) 299-4901

Company Shuttle Programs

- Administrative Hospital Services, Inc.
Sandra Snyder, Director
2976 Summit St., 2nd Floor
Oakland, CA 94609
(415) 465-1627
- Chevron
Sheila Moura, Employee Relations
P.O. Box M, Section 17
Concord, CA 94524
(415) 827-6398
- Children's Hospital
Cliff Chambers, Transportation Broker/Coordinator
3700 California St.
San Francisco, CA 94118
(415) 864-7552, ext. 246 (Children's)
(415) 668-1000, ext. 8450 (St. Mary's)
- Lawrence Berkeley Laboratory
Eddie Yates
University of California
#2 Cyclotron Road
Berkeley, CA 94720
(415) 486-5151

APPENDIX

- Employer Transit Ticket Sales — Fact Sheet
- Sample Employee Shuttle Survey (BART)

EMPLOYEE TRANSIT TICKET SALES

- Muni:** Sells fast passes on consignment through employers. Employer receives a 25 cent-per-pass commission. Employer signs an agreement with Muni, sells passes during approximately two weeks each month, and completes a Fast Pass and Discount Pass Issue and Remittance form. Muni picks up unsold passes each month. Muni also sells passes through banks; a list is available. Contact Ralph Bryant - (415) 558-3045.
- BART:** Employers may purchase \$10 and \$20 BART tickets for sale. There is no commission. Tickets are normally sold in lots of 100, but arrangements may be made to purchase fewer tickets. Refunds are issued on unsold tickets. Contact Alice Delgado - (415) 465-4100, ext. 510.
- Golden Gate Transit:** Currently sells commute ticket books through the banks, transit terminals and other outlets listed on the commute pamphlets. Contact Bruce Selby - (415) 457-3110, ext. 27.
- SamTrans:** Sells 20-ride commute books, reduced fare permits, and youth, handicapped, and elderly discount tickets on consignment through employers. A 5 percent commission is offered, and a contract is signed. Contact Aubrey Lumley or Carol Farron - (415) 573-2252.
- AC Transit:** Currently sells monthly passes through grocery stores and universities. Will consider making a similar arrangement to sell passes on consignment through major employers. (Concern is for the volume of tickets sold and difficulty of distribution.) Contact the Marketing Department, Mike Mills - (415) 891-4777/4875.
- Santa Clara County Transit:** Sells several types of commute tickets on consignment through employers. There is no commission. Unsold tickets may be returned. There is a written procedure and monthly reporting system. Contact Francis Masson - (408) 299-4141.

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EMPLOYEE SHUTTLE SURVEY

1. Do you reside within 3 miles of a BART^{*} station?
_____ Yes _____ No If yes, which station? _____
2. How many days each week would you use BART to reach work if a shuttle van were available every 15 minutes to transport you to work upon your arrival at the _____ BART station?
3. How do you presently reach your place of employment?
_____ drive alone _____ carpool _____ AC Transit
_____ BART _____ other (specify) _____
4. What time do you normally arrive at work? _____ (to nearest 5 min.)
5. What time do you normally leave work? _____ (to nearest 5 min.)

^{*}Substitute Southern Pacific or express bus lines as appropriate.



Cycling and walking are valuable commute modes often neglected in transportation programs.

CHAPTER 3

CYCLING AND WALKING

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CHAPTER 1 CYCLING AND RAILROADS

SUMMARY AND DEFINITION

Bicycling and walking can be important elements of a company's transportation program if there are a number of employees who live within a few miles of work. In addition to providing an inexpensive way of getting to work, bicycling and walking are healthy, enjoyable forms of exercise. Bicycling is most attractive to employees who live within five miles of work, although many experienced cyclists are willing to ride much further, especially if road conditions and terrain are not adverse. Walking is most prevalent among employees who live within one mile of the work site.

A company can encourage bicycle commuting by offering facilities and incentives and marketing the program. By encouraging bicycling and walking, companies demonstrate an interest in their employees' physical well-being while minimizing the impact of commute traffic on the local environment. This attitude is both good public relations and an inducement in employee recruitment.

Motorcycles and mopeds are also energy-saving means of getting to work which employees may wish to see included in a bicycle incentive program.

SUCCESS STORIES

Xerox, Palo Alto

At the Xerox research facility in Stanford Industrial Park, Palo Alto, 18 percent of the 500 employees commute by bicycle. Xerox provides bike racks in covered sheds for parking; flexible work schedules to accommodate bike use; and showers, clothing lockers and free towels. In addition to being located in a city that has bike lanes and supports bike use, the facility has a high number of employees who live within several miles of work. There is also provision for legal bike access on a nearby expressway. The company feels the success of bicycle commuting has primarily to do with employee interest in health, exercise and energy alternatives. Company support and facilities are designed to encourage employee interest.

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory has 500-600 employees commuting to work on bicycles, out of a total of 7,200 employees. The number of bike commuters usually increases to 800 in the summer. The Lab has an extensive bicycle program; bicycle parking is made available, as are showers. There is a good system of bike paths in the city of Livermore as well as on site. In addition, the Lab provides 900 on-site bicycles for commuting between buildings, as well as a bike repair crew who service and place the bikes around the various buildings. Since this is a secure site with guarded gates, bike theft is not a problem. Again, flat terrain, bike paths and a pool of employees with a strong interest in energy alternatives seem to be the primary criteria for the success of the bike program.

Lockheed Missiles and Space Co., Sunnyvale

Lockheed also provides about 1,100 bikes for internal travel in its Sunnyvale facility. Bike racks, shower facilities and "bike passes" are available so that employees can bring their bicycles onto the company facility. A group of active employees in the company have formed their own bike club. However, heavy auto traffic and freeways in the area make it difficult to commute by bicycle.

Hewlett-Packard, Palo Alto

Hewlett-Packard in Palo Alto has an extensive bike program as part of its overall transportation program. Hewlett-Packard encourages bicycle commuting in a variety of ways. The company has contributed to the cost of bike paths in the city of Palo Alto and provides 90 lockers and 90 bike racks, as well as showers in the new corporate offices. It also provides bicycle information to employees. At both Hewlett-Packard's Cupertino and Palo Alto sites, 9 percent of the employees report that they bicycle to work.

Syntex and Syva, Palo Alto

Syntex in Palo Alto provides bike racks and showers for its 2,000 employees, 5.3 percent of whom commute by bicycle. It provides an enclosed bicycle garage at Syva Co., a Syntex subsidiary located on the same site in Palo Alto. Syntex also has contributed funds towards completion of an off-road bike path to provide access to the site.

BICYCLING AND WALKING PROGRAMS

A commute alternatives program may encourage bicycle and walk commuting, offer bicycles for on-site use or errand trips, and promote using bicycles in conjunction with transit.

SETTING UP BICYCLE AND WALK COMMUTE PROGRAMS

Determine the Potential Market for a Bicycle or Walk Commute Program

Actively promoting bicycle or walk commuting is worthwhile and workable if there is a potential bike or walk commuting population and if suitable physical conditions exist. The feasibility of a bicycle commute program may be determined by looking at work trip distances, employee interest and attitudes, and the physical surroundings of the work site. Interest in motorcycle and moped commuting should also be assessed.

Do Many Employees Live Close to Work?

The simplest way to determine whether there is a potential market for a bicycle or walk commute program is to use personnel data on employee residence location to see how many employees live within a reasonable cycling or walking distance. The same information will be provided by a basic transportation survey (see Administration Chapter). Usually five miles is a reasonable distance for cycling and one to two miles for walking.

Are Employees Concerned About Physical Fitness, Energy Use or Improving the Environment?

Questions may be added to the basic survey or a separate survey conducted to ascertain employee interest in cycling, walking, or jogging to work. General interest in physical fitness and energy conservation may also be gauged. (Sample survey questions are included in the Appendix of this chapter.)

Is There an Active Cycling Group?

A survey will also identify employees already cycling to work who can provide information about access problems and on-site facility needs. People living within five miles might be invited to small group discussions on the topic of bicycling or walking to work.

Does the Surrounding Area Provide Safe, Convenient Access?

It is unrealistic to expect to develop a substantial bike population where the terrain is excessively hilly or difficult. In addition, natural barriers such as freeways, very heavy traffic, narrow and congested streets, and rough roadways will discourage bike use. Lack of sidewalks or obstacles to direct pedestrian access such as landscaping will

discourage walking to work. Bicycle programs are most successful in cities such as Palo Alto and Davis with extensive and usable bike lanes and paths.

Existing bikeways, traffic flow, width and suitability of streets, and barriers to bicycle or pedestrian travel may be investigated by touring the area, talking with local bicycle organizations and employees who bike or walk to work, and asking the city and county public works departments about plans for bicycle and pedestrian facilities.

If a number of employees live close to work, if the level of employee interest in physical fitness, energy conservation and environmental protection is high, and if bicycle access to the site is convenient, a bicycle commute program will have a good chance of success. A goal of 5 to 10 percent of employees bicycling or walking to work is reasonable when these conditions exist. Bicycle and walk commuting can be promoted by eliminating barriers, providing incentives and marketing the program.

Eliminate Barriers to Bicycle and Walk Commuting

Several deterrents to bicycle commuting exist. These include: the dangers of riding in heavy traffic or the inconvenience of traveling out of the way to avoid freeways and other barriers; the difficulty of riding in hilly areas; having no secure place to store the bike on arrival; and the need for changing from cycling clothing to work clothing, and possibly the need for a shower.

Several things may be done to eliminate these barriers to bicycle commuting:

Provide Bicycle Parking Facilities That Are Covered and Secure

Bicycles are susceptible to theft and to damage by exposure to weather. A variety of lockers are available to provide complete security and weather protection; or secure bicycle racks can be placed in a covered area. (See Appendix for more information on available lockers and racks. *A Comparative Study of Bicycle Racks*, and *Bicycle Parking* cited in the References, should also be consulted.) A locker room, shed or fenced section of a parking lot also makes a good bicycle storage area. Active bicyclists should be consulted for advice on parking facilities. Jim Heaphy of Kaiser Hospital in San Francisco reports that their cyclists are quite impressed with the Bike Lockers Ltd. locker. Bicycle parking takes up much less space and therefore costs significantly less than auto parking. Companies that do not have space for bicycle lockers or racks may allow employees to bring bikes into their offices for safekeeping.

Provide Showers and Clothing Lockers

Most employees will feel more comfortable about bicycle commuting if they have a place to shower and change clothes upon arriving at work. Clothing storage lockers also make bike commuting easier. A relaxed dress code can serve as an inducement to cyclists as well. Showers will also be welcome by employees who jog to work or those who use the lunch period for exercise.

Help Provide Safe and Convenient Access to the Site

Safe access is integral to substantial bike use. On-site bike lanes are very useful, but there should be good access from city streets as well. A company that wishes to encourage bicycle commuting might consider contributing toward construction costs for a bicycle lane or separate path as has been done by Hewlett-Packard and by Syntex in Palo Alto. Improvements can also be made within company grounds to provide safe and direct access for cyclists and walkers.

Local bicycle organizations and city and county public works officials will assist companies in defining appropriate sites for special bike lanes and paths. They can be called upon to identify street and road improvements such as striping and signing that will benefit bicyclists. They can also provide assistance in identifying the best cycling routes in the area. Coordinators should work closely with bicycle groups and local

planning officials as well as with employee cyclists to define street and road improvements that will encourage bicycling.

Market the Program

Provide Incentives

Getting people to change their commuting habits is not easy and will probably require the aid of an incentives program. To attract new bicycle commuters, a company might consider giving cash rebates to employees who purchase bicycles for commuting or setting up a credit program for buying a bicycle. Arranging a discount program with local bicycle merchants might appeal to others. Another incentive is to pay bicyclists an annual fee as reimbursement for repairs and bicycle maintenance. Employees who commute by bicycle, motorcycle, moped or on foot could be included in any drawings or other incentives programs offered to employees who rideshare. Bike commuters at ROLM are eligible for regular prize drawings of the cash equivalent of a share of company stock for their participation in an alternative commuting mode.

Some employers, such as the city of Palo Alto and the state of California, reimburse cyclists for business travel by bicycle. Palo Alto currently pays cyclists 7 cents per mile, while the state pays 4 cents per mile. The cost of providing bicycle parking facilities, showers and cash incentives is deductible on state income taxes (see Table 21).

Inform Employees of the Benefits of Bicycle Commuting

Informing employees of the benefits of bicycle commuting can do much to heighten their awareness of this healthful mode of commuting. Marketing the program should appeal to employee interest in physical fitness and the time savings of using the commute as a daily exercise period. The possibility of enjoying one's trip to work could also be marketed as well as one's "liberation" from the automobile. Pete Peterson, a stock broker who commutes from San Carlos to Palo Alto, says "I don't think of my commute as going to work. Rather, I'm going out for a bicycle ride." Cost savings and the potential of travel time savings for short trips should also be stressed. Bicycle commuting contributes to the well-being of the local community. People on bicycles don't pollute the air and they don't add to the general traffic noise level. Bicycling also contributes to solving our national energy problem.

Provide Bicycle Safety and Maintenance Education

An education program should include regular seminars, clinics or films on bicycling, featuring such topics as rules of the road, route selection, general tips on safety, equipment care, and repair and maintenance.

Publicize the Program

Publicity for a bicycle commute program should be integrated with a company's overall commute alternatives program. If the conditions are ripe for bicycle travel to your work site, bikes should be given equal billing with ridesharing and transit. To publicize bicycling facilities and incentives, announcements and feature articles could be run in the company newsletter or notices included with paychecks. Press releases to local media might generate positive community response to the company's concern for the local environment and the health of its employees.

Establish an Information Center

A bulletin board information center should be set up for posting notices of interest to cyclists: new bike lanes or better commute routes, details on locker rentals, bikes for sale, meetings and activities of the company bicycle group, etc. A bicycle coordinator should be designated to keep the board current and be available to assist new cyclists.

Encourage Bike Clubs and Activities

Employee bike clubs and bike activities should be encouraged. If bike commuters form their own support and activity groups, they in turn will market the strategy to other employees and identify program improvements. Recreational rides should be publicized. Many bicycle commuters started cycling for recreational purposes. When these weekend riders meet bicycle commuters on recreational rides they may be persuaded to try biking to work. The coordinator should maintain contact with representatives of the employee bicycle commute population in order to monitor and evaluate the program.

Inform Management of the Benefits of Bicycle Commute Programs

Stress the potential cost savings to the company of encouraging bicycle use rather than driving alone. Sponsoring a bicycle program also has public relations value and may aid in recruiting new employees. A well-publicized bicycle and pedestrian commute program shows company concern for lowering energy use and improving the environment. Research is also beginning to show that employees who are physically fit are more productive workers.

BICYCLES FOR INTERNAL ACCESS OR ERRANDS

Both Lockheed and Lawrence Livermore National Laboratory provide bicycles for on-site use. At the Lab, these bicycles are also used to get to the bus stop just outside the site. This type of program works best in a fenced and secure site and usually requires a crew to maintain the bikes and distribute them among buildings.

BICYCLES AND TRANSIT

Another means of getting to work is the combination of a bicycle and transit; this involves biking to transit and parking the bike, or biking to transit and taking the bike on transit. A bicycle commute program should include current information on bicycle and transit commute possibilities.

Biking to transit and parking the bike requires bicycle racks or lockers at transit stations or park-and-ride lots. BART provides bicycle racks and lockers. There is a rental fee for the lockers. Lockers exist at several Southern Pacific stations, and more are being installed.

Bicycle lockers are also sometimes included in park-and-ride lots for commuting with express bus service. Contact RIDES, Caltrans District 04, or your local transit operator for information on bicycle park-and-ride lots.

BART allows bikes on the system during off-peak hours and on weekends with a permit. Bikes are also allowed on BART during the peak in the reverse commute direction between Rockridge and Concord, Ashby and Richmond, and Lake Merritt and Fremont. Permits are now available from BART by mail. More information and a permit application form are included in the Appendix. The other transit systems in the Bay Area do not currently have facilities for carrying bikes on buses or trains.

Caltrans provides a commuter bicycle shuttle across the Bay Bridge during the rush hour, from the MacArthur BART station in Oakland to Main and Folsom Streets in San Francisco. Four trips go into San Francisco in the morning and out in the evening; three trips are made in the opposite direction. The vehicles are vans with a bike trailer; the fare is 50 cents one way. Call the number listed in the Contacts section for more information.

Golden Gate Ferries welcome bikes aboard their vessels. Call Golden Gate Transit for further information.

Southern Pacific (Caltrain) recently ran a pilot project to test the feasibility of transporting bicycles on its commuter trains. The results of the project are now being evaluated.

Bicycles and Car or Vanpools

Another possibility for commuters is using a bike to get to and from a vanpool or carpool staging area. The rideshare group may agree to meet at a park-and-ride lot or another location where bicycle storage space is available. Or bikes may be carried on the car or vanpool and used at the work-end of the trip if the group purchases an inexpensive bike rack to attach to the vehicle. The coordinator should discuss these possibilities with employees and keep them in mind as ways to extend rideshare-matching possibilities. RIDES should also be informed if hard-to-match applicants are willing to bike to and from the rideshare route.

Bicycle promotion strategies are summarized on Table 13.

TABLE 13
BICYCLE STRATEGY CHECKLIST

To bike or not to bike?

- Is the terrain relatively level near your facility?
- Are there few significant physical barriers to bike use?
- Does your city have bike lanes or wide boulevards?
- Does your facility have reasonable bike access?
- Do your employees use bicycles for recreational travel?
- Are your employees concerned with energy alternatives?
- Are your employees concerned with physical fitness?
- Do a substantial number live within five miles of work?

Can your program:

- provide secure weather-protected bicycle parking?
- arrange for bicycle education classes?
- provide showers and clothing storage?
- offer credit for purchase of a commute bicycle?
- work out an agreement with a local bike shop for discounts?
- develop marketing and promotional items?
- inform management of the benefits of bike use?
- set up a "bike repair day"?
- develop bike lanes on company property?
- maintain a fleet of bikes for internal access or errands?
- provide information about park-and-ride lockers?

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REFERENCES

Books

- *The Bicycle: A Commuting Alternative*, by Frederick L. Wolfe, Signpost Books, 1979 (available in bookstores and bike shops for \$7.45).
- *Bicycle Parking* (available from Ellen Fletcher, 777-108 San Antonio Rd., Palo Alto, CA 94303, \$4.95 plus 6 1/2% tax).
- *A Comparative Study of Bicycle Racks*, by Thomas S. Pendleton and Peter A. Lagerwey, January 1981 (available from Bicycle Program, Transportation Department, City of Ann Arbor, Michigan).
- *Effective Cycling - A Handbook for Safe, Fast Bike Travel*, by John Forester, 1975 (available from Custom Cycle Fitments, 782 Allen Court, Palo Alto, CA 94303, \$10 plus .65 tax).
- *Planning and Design Criteria for Bikeways in California* (available from Caltrans, 1120 N St., Sacramento, CA 95814).

Newsletters

- *California Commuting Cyclist*, published by Caltrans Office of Bicycle Facilities, P.O. Box 26474, Sacramento CA 95826.
- *League of American Wheelmen Bulletin*, 10 East Read St. P.O. Box 988, Baltimore, MD 21203.
- *Pro-Bike News*, published by the Bicycle Federation, Suite 309, 1101 15th St., N.W., Washington, D.C. 20005, \$12 for 12 monthly issues.

Films

- "Bicycling Safety on the Road"
- "Cycling Under Your Own Power"
- "Only One Road"

(These and several other bicycling films are available for showing free of charge from California State Automobile Association, Film Librarian, Traffic Safety Department, 150 Van Ness Ave., San Francisco, CA 94101, 415-565-2310.)

- "Bicycling to Work" (videotape), (available from Environmental Protection Agency, San Francisco, 415-556-1840).

Courses

Repair

- Missing Link
1988 Shattuck Ave.
Berkeley, CA 94704
(415) 843-7471
- Velo Sport
1650 Grove St.
Berkeley, CA 94709
(415) 849-0437

Effective Cycling

- John Forester
726 Madrone Ave.
Sunnyvale, CA 94086

For more information on bicycle repair and safety courses, check with local bike shops, colleges and adult education outlets.

CONTACTS

State

- Caltrans
1120 N St.
Sacramento, CA 95814
(916) 445-7345
Linda Turnquist
Chief, Office of Bicycle Facilities
- Caltrans
District 04
P.O. Box 3366, Rincon Annex
San Francisco, CA 94119
Wallace J. Rothbart (415) 557-0693
Jack Allen or Jim Nelson (415) 557-1611

City

Contact the city Public Works Department

County

- | | | |
|------------------|-----------------|----------------|
| • Alameda: | Ray Burnham | (415) 881-6470 |
| • Contra Costa: | Bob Faraone | (415) 372-4184 |
| • Marin: | Jack Baker | (415) 499-6530 |
| • Napa: | Lynn Lambert | (707) 253-4351 |
| • San Francisco: | Scott Shoaf | (415) 558-3371 |
| • San Mateo: | Ernie Vovakis | (415) 363-4161 |
| | Bruce Kirk | (415) 363-4100 |
| • Santa Clara: | Hiro Kurotori | (408) 299-2362 |
| • Solano: | Kaj Malthe | (707) 429-6463 |
| • Sonoma: | Bill O'Connel | (707) 527-2231 |
| • Santa Cruz: | Holly Marcelino | (408) 425-2776 |

Regional

- Metropolitan Transportation Commission
Susan Bachman (Alameda, Contra Costa, and San Francisco Counties)
Shanna O'Hare (Santa Clara and San Mateo Counties)
Myrna Valdez (Marin, Napa, Solano and Sonoma Counties)
(415) 849-3223

Bicycle Organizations

- California Association of Bicycling Organizations
Alan Wachtel (408) 744-0810, ext. 666
- East Bay Bicycle Coalition
Matthew Bowden, (415) 834-5276
- Marin Cyclists
Tory Ann Bortfeld, (415) 388-2172
- San Francisco Bicycle Coalition
Holland Jones, (415) 387-4978
- Santa Clara Valley Bicycle Association
George Godlewski, (408) 867-1793
- Sonoma County Trails Committee
P.O. Box 483
El Verano, CA 95433
- Western Wheelers Bicycle Club
P.O. Box 183
Menlo Park, CA 94025

(Most Bicycle groups have newsletters filled with tips on riding safely, as well as information on bike routes, and relevant publications.)

Company Programs

- City of Palo Alto
Gayle Likens, (415) 329-2136
- Lawrence Livermore National Laboratory
Joe Podrosky, (415) 422-POOL
- Lockheed Missiles and Space Co.
Cecil Pennington, (408) 743-2603
or Pat Mooney
- ROLM Corporation
Charlie Rottler, (408) 496-0550 ext. 5241
- Syntex Corporation
Nancy Templeton, (415) 855-5276
- Xerox Corporation
Joe Griffiths, (415) 494-4025

Bikes on BART

- Office of Passenger Service
Bay Area Rapid Transit District
800 Madison St.
Oakland, CA 94607
Starla Bahem, (415) 465-4100, ext. 510

Caltrans Bay Bridge Bicycle Shuttle

- Caltrans, District 04
Jack Allen, (415) 557-1611
or Jim Nelson

Ferry Service

- Golden Gate Transit (Marin County San Francisco)
Bruce Selby, (415) 457-3110

APPENDIX

- Sample Survey Questions
- Information on Available Bicycle Storage Facility Types
- Bikes on BART Program Information and Permit Application

APPENDIX

THE APPENDIX CONTAINS THE
LIST OF THE NAMES OF THE
MEMBERS OF THE COMMITTEE
AND THE NAMES OF THE
MEMBERS OF THE SUBCOMMITTEE

SAMPLE SURVEY QUESTIONS

This survey of an industrial park in Vallejo, California, was used to determine the potential for increased bicycle use. A five mile distance is reasonable for bicycle commuting and 10 miles is possible for an experienced cyclist.

How do you usually get to work?

Drive alone	81.2%
Carpool	13.7
Ride a bus	.7
Bike	3.9
Walk	.5

Distance from home to work

0 to 5 miles	51.2%
5 to 10 miles	21.3
10 to 15 miles	19.0
over 15 miles	8.5

Agree or disagree?

	Agree	Disagree	Don't know
I enjoy riding in a car and prefer to make all my trips this way	58.5%	26.9%	14.6%
I would rather not have to drive to work	36.4	51.6	12.0
I prefer to ride to work by myself	40.3	45.5	14.2
I live too far from work to walk or ride a bike	67.2	29.5	3.3
I enjoy riding a bike because it's cheap and I like the exercise	50.6	36.5	12.9
I will not ride a bike because it's not safe	33.1	57.4	9.5

Other useful questions to include in such a survey are:

- I would ride my bike if I could take a shower.
- I would ride my bike if there were a safe place to keep it.
- I would ride my bike if I felt more confident in traffic.



Reprinted from "Bicycle Commuting - A Handbook for Employers" prepared by Bicycle Commuter Service, Portland, Oregon

APPENDIX D

BICYCLE RACKS

TABLE B — UNIVERSITY OF MARYLAND RACK COMPARISON

TRADE NAME	ADVANTAGES	DISADVANTAGES
Rally Rack RR-100	• Secures rear wheel and frame with a single lock • Rack consists of a single post and has no moving parts • Rack is very easy to use • Rack has aesthetic appeal by virtue of its good design	• Does not secure the front wheel
Rally Rack RR-200	• Rack has the advantages of the RR-100 with the addition of a cable attached to the post which secures the front wheel	• Cable is vulnerable to bolt or wire cutters
Rally Rack RR-300	• Rack has the advantages of the RR-100 with the addition of a formed steel plate which prevents removal of the front wheel	• Cost is more than twice that of the Rally Rack RR-200
Standard Rack	• Least expensive of all rack systems	• Provides the least security of all rack systems, requiring an unusually long chain or cable supplied by the user to secure both wheels and frame of a bike making it vulnerable to bolt or wire cutters • Bikes parked in these racks are easily damaged • Rack design encourages inefficient and cluttered parking arrangement
Bala Byk-Lok Rak	• Secures both wheels and frame with a single lock • All locking components are constructed of steel	• Poorly constructed — welds break with normal use • Not easy to use — requires four steps to secure bike • Does not provide arrangement flexibility • Visually clutters the environment — has no aesthetic appeal • Rusts over time
Howard Bike Lockup	• Secures both wheels and frame with a single lock	• Disadvantages are identical to those listed for the Bala Byk-Lok Rak
Park-A-Bike	• Secures both wheels and frame with a single lock • Relatively easy to use	• Visually clutters the environment — has no aesthetic appeal • Cable which secures both wheels may be vulnerable to bolt or wire cutters
Rack III	• Secures both wheels and frame with a single lock • All locking components are constructed of steel	• Secures bicycles with a pivoting three-pronged device — this moving part may prove troublesome

Note:

The Santa Clara Valley Bicycle Association and the City of Palo Alto (California) favor the Rack III as providing the best protection from vandalism and theft. No rack, however, offers the complete protection provided by a bicycle locker.

TABLE A — AVAILABLE BICYCLE STORAGE FACILITY TYPES

Name of Device	Manufacturer — City, State	Class	Model	Price	Notes
1. Rack III	Rack III, 1714 Stockton St. San Francisco, Ca. 94133	II	Key Coin-Op Padlock	\$120.00 each \$120.00 each \$ 41.75 each	Used at many locations throughout U.S. Each rack holds one bicycle
2. Rally Rack	Rally Enterprises, Inc. Box 299, Sonoma, Ca. 95476 (Minimum Order: 6)	II II II II	RR-100 RR-200 RR-300 RR-400	\$ 22.00 each \$ 25.00 each \$ 55.00 each \$160.00 each	Each rack holds one bicycle. Used by PATH system (NY-NJ) at Journal Sq. Transportation Center Used by WMATA (DC) at present and future stations PATCO (PA-JN) installing 171 RR-300's Key-Coin operated
3. Cycle-Sentry	Sentec Industries* P.O. Box 4043 San Francisco, Ca. 94110	II	Galvanized Painted	\$ 36.00 each \$ 39.00 each	Each rack holds one bicycle
4. Bike Safe	Patterson-Williams P.O. Box 4040 Santa Clara, Ca. 95054	II	1615-2 1615-5	\$100.00 each \$210.00 each	Holds two bicycles Holds five bicycles
5. Bala-Byk Lok-Rak	Bala-Byk-Lok-Rak 691 Parkview Circle Pacifica, Ca. 94044	II	Padlock Coin-Op	\$ 31.50 each \$ 65.50 each	Installed at U. of Maryland Each rack holds one bicycle.
6. Bike Lock Up	Howard Enterprises 1250 Wilson Way Stockton, Ca. 95205	II	Standard Deluxe	\$ 31.00 each \$ 35.00 each	Each rack holds one bicycle. Installed U. of Maryland
7. Park-A-Bike	Park-A-Bike Systems 180 Coor St., Suite 111 Denver, Col. 80206	II	—	\$ 25.00 to \$ 75.00 each	Holds one bicycle Installed U. of Maryland
8. U-Lok	Sunshine Recreation Co. 22713 Ventura Blvd., Suite A Woodland, Ca. 91364	II	Security stand	\$ 45.00 each	Holds two bicycles; installed at various colleges; special lock option
9. Bike Root Bike Rack	The Bike Root Co. 31 1/2 Mt. Vernon St. Charlestown, Mass. 02129	II	—	\$ 28.50 each	Holds one bicycle.
10. Bike Lokr	Bike Lockers P.O. Box 978 North Highlands, Ca. 95660	I	Padlock Coin-Op/ Key-Op	\$320.00 each \$320.00 each	2 bicycles per locker; installed by BART, EPA, Metro Md.
11. Bike Stable	Bike Stable Co. P.O. Box 1402 South Bend, Indiana 46624	I	Key-Op	\$214.00 each	Holds one bicycle. No units have been sold up to this date.
12. Mac Cycle Vault	BMR Fabrications** P.O. Box 610 Toccoa, Ga. 30577	I	Padlock Coin-Op	\$194.00 each \$250.00 each	One bicycle per locker One bicycle per locker

University of Maryland Planning Department Bicycle Rack Criteria

- The rack must secure both wheels and the bicycle frame.
- Securing the bicycle in the rack is to be a simple operation.
- The rack is to accommodate a wide range of bicycle types and locking mechanisms.
- Securing the bike must be possible

- with only a user-supplied lock.
- Although data is not available on durability, racks should be selected for their apparent quality. Members and joints should be rustproof and designed to minimize or eliminate structural and mechanical failures.
- The appearance of the rack is to be "aesthetically pleasing" within the financial and functional parameters.

- The rack design is to allow for flexibility in site development.
- While racks must be capable of being securely anchored, the ability to relocate them is an option to be considered.

The final University of Maryland report states that: "Research has determined that the Rally Rack Models RR-200 and RR-300 are superior to all other manufacturers in meeting the established criteria."



BIKE LOCKERS, LTD.

P.O. Box 445, West Sacramento, Ca. 95691
Ph. (916) 372-6620

Current Price 08/25/82 (good for 90 days)

Model M-2 (2 door, 2 bicycle unit)
\$384.00 plus tax per unit, delivered and installed within the Bay area.

Minimum order 10 units.

Unit General Specifications

Model M-2

For 2 standard bicycles (or small motorcycles)

Primary Construction Materials

Sides, roof, doors, back and partition: Weather resistant Phenolic board made to

Commercial Standard 236-66 type 2-B-2 Overlaid, or MDO Ex. Plywood.

Framing: Aluminum Extrusions, 6063 T 5, Clear anodized.

Exterior Finish: Colored Acrylic, or equal, to withstand weathering.

Interior Finish: Phenolic overlay, or equal, for durability.

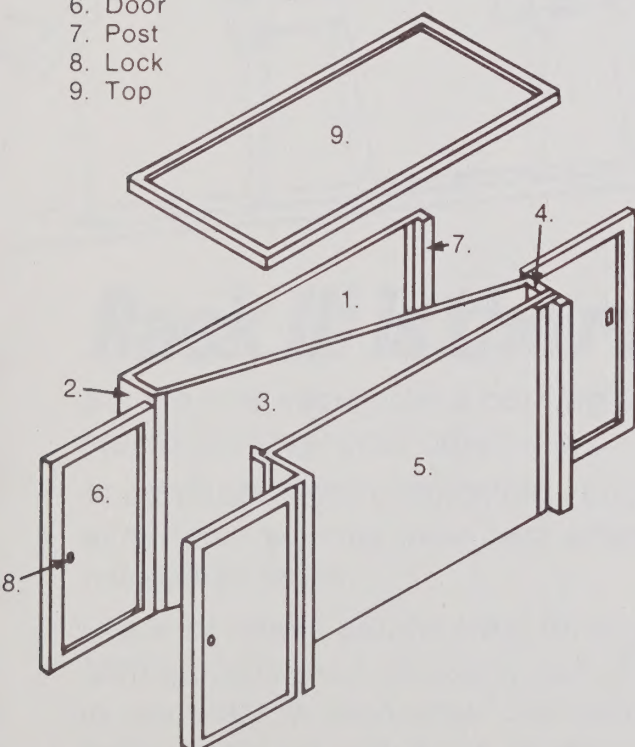
Hardware: All screws and ground attachments are internal.

Locks: Pop-out handle with 7-pin tubular key locks, or Barrel Bolt type to accept high security padlocks.

Door hinge and door latch: Continuous, interlocking, anodized extrusions.

Ships knocked down for field assembly

1. Outside Side
2. Back
3. Divider
4. Back
5. Inside Side
6. Door
7. Post
8. Lock
9. Top



Top View

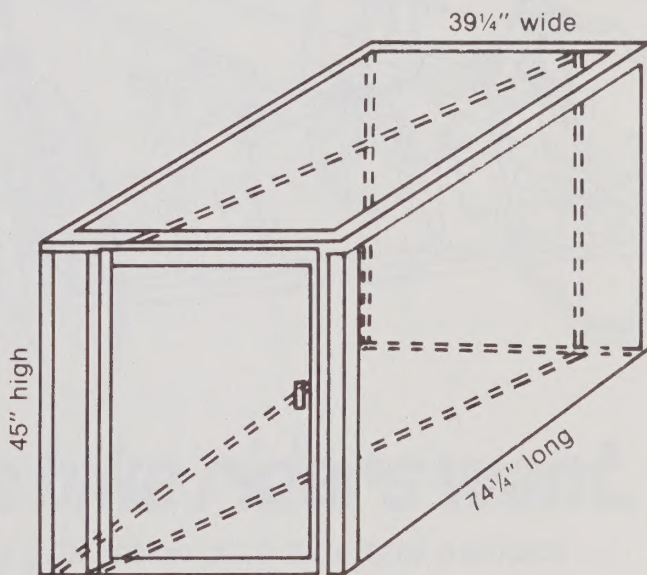
10 M-2 Lockers
20 Bicycles



Length 33'
Width 74 1/4"

Model M-2 Bike Locker

3 dimensional view
For 2 standard bicycles



Weight 300 pounds

Other Models available for Mopeds and Motorcycles
M-2M, M-3, and H-2 Home Locker Unit

Circles and curved installations available on special order.

United States Patent No. 3,967,425

The best way in the world to park a bike.

THE JOURNAL OF THE

ROYAL ANTHROPOLOGICAL INSTITUTE

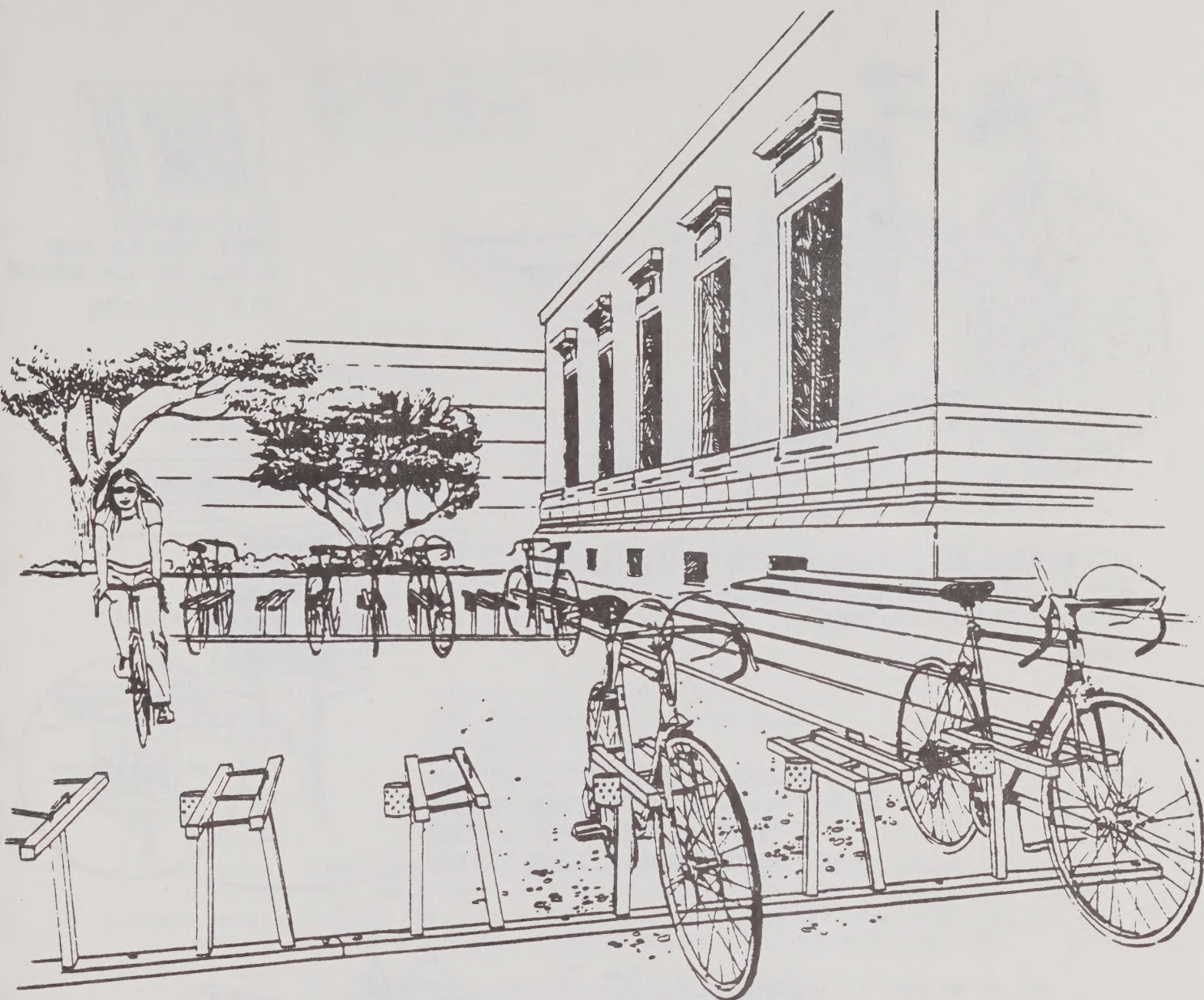
VOLUME 100, PART 1, 1970

EDITED BY J. H. REES

Published by the Royal Anthropological Institute

21, BEDFORD SQUARE, LONDON, W.C.2A 3EU

Printed in Great Britain



Rack III is the rack the bike riders want.

It's the one secure bike parking system offering protection plus a unique padlock shield that prevents break ins.

In addition to the unexcelled security features, bike riders like the way Rack III eliminates worries over bent wheels and frames on fine 10-speeds...a major problem with other racks.

Made of heavy gauge steel throughout, Rack III is coated with an attractive long-lasting, baked-on, epoxy finish. Shipped fully assembled, installation in concrete is recommended using the three self tapping anchor bolts supplied with each double unit.

So...if you want a rack the bike riders will use and appreciate, choose Rack III. It's the rack they're asking for!

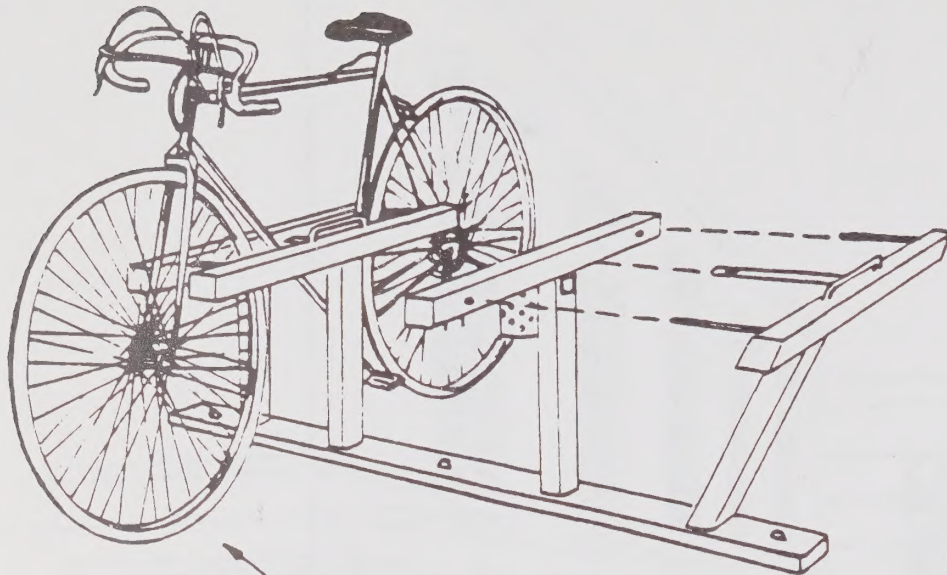
**NEW ADDRESS
3661 GRAND AVE.
OAKLAND, CA 94610**

415 835-8058

**rack III
rack III
rack III**

PAT. 3,793,659

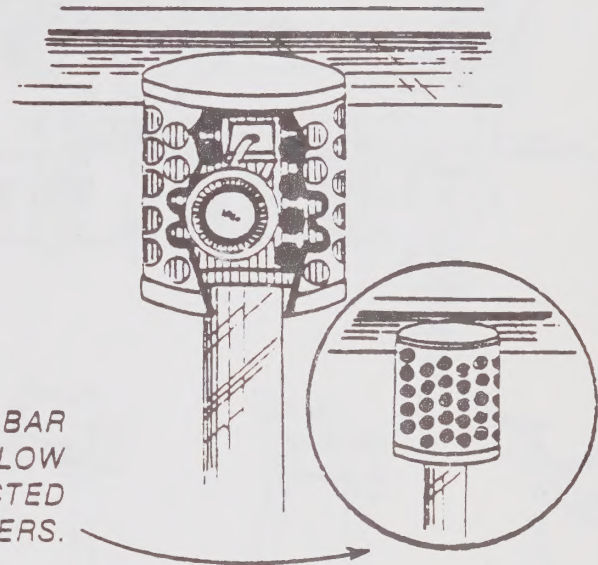
1714 Stockton Street
San Francisco, CA 94133
Telephone (415) 397-3485



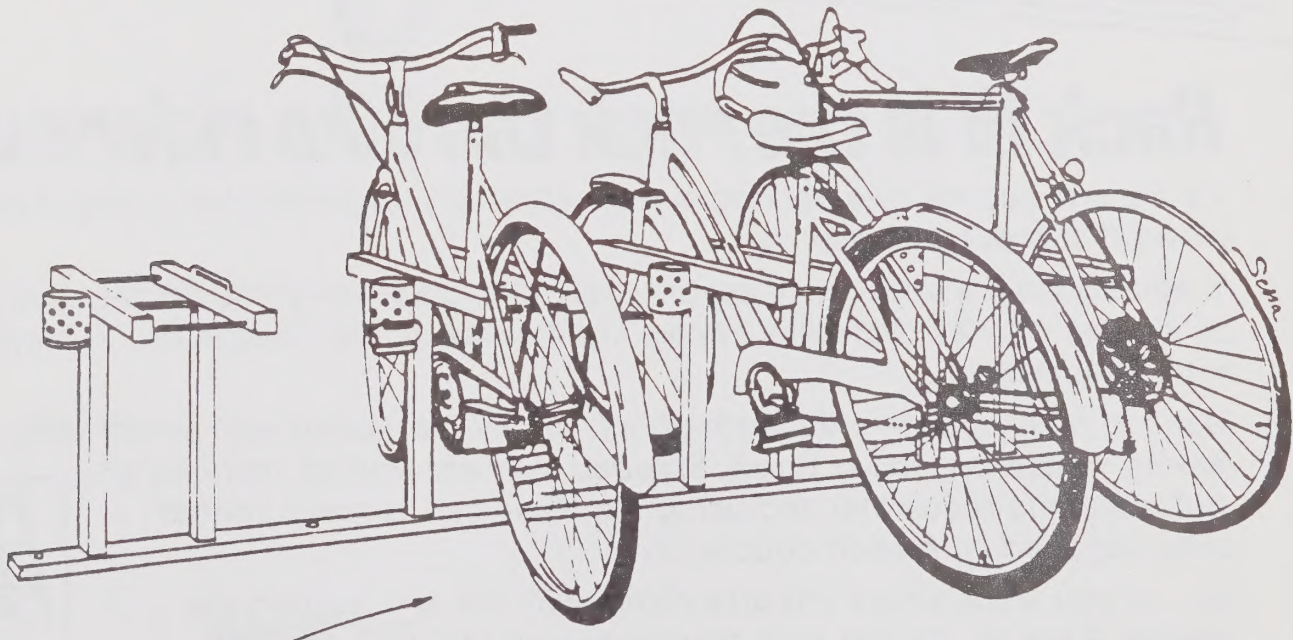
MOVEABLE ARM CLOSSES TO PROTECT FRAME AND BOTH WHEELS WITHOUT NEED OF HEAVY CHAIN OR CABLES.

**rack III
rack III
rack III**
PAT. 3,793,653

NEW ADDRESS
3661 GRAND AVE.
OAKLAND, CA 94610
415 835-8058



PADLOCK SECURING LOCK BAR IS INSTALLED IN CAGE FROM BELOW AND IS COMPLETELY PROTECTED FROM PRYING AND BOLT CUTTERS.



PROVIDES ORDERLY, SECURE BICYCLE PARKING.

BAY AREA RAPID TRANSIT DISTRICT
800 Madison Street
Oakland, California 94607
Telephone (415) 465-4100

NELLO BIANCO
PRESIDENT

EUGENE GARFINKLE
VICE-PRESIDENT

KEITH BERNARD
GENERAL MANAGER

DIRECTORS

BARCLAY SIMPSON
1ST DISTRICT

NELLO BIANCO
2ND DISTRICT

ARTHUR J. SHARTSIS
3RD DISTRICT

HARVEY W. GLASSER, M.D.
4TH DISTRICT

ROBERT S. ALLEN
5TH DISTRICT

JOHN GLENN
6TH DISTRICT

WILFRED T. USSERY
7TH DISTRICT

EUGENE GARFINKLE
8TH DISTRICT

JOHN H. KIRKWOOD
9TH DISTRICT

Dear Cyclist:

As you have indicated that you would be interested in obtaining a BART bicycle permit, I am sending you the enclosed information on the program. Please read the program carefully, especially the sections on Transport Procedures and Rules and Regulations.

To obtain a permit, you must complete the enclosed application, together with a signed Release of Liability and Indemnification and a postal money order, cashiers check, or a personal check that has your name and address on it for \$3.00 and return it by mail to:

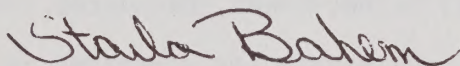
Office of Passenger Service
Bay Area Rapid Transit District
800 Madison Street
Oakland, CA 94607

Attn: Bike Permit Office

Also, if you are interested in obtaining a bike permit in person, this can be done at the above address by appointment only. Bike permits are issued Tuesday through Saturday from 9:00 a.m. to 3:00 p.m. To make an appointment call 465-4100, ext. 569.

If you have any questions, please feel free to call me at the above listed telephone number, ext. 510.

Sincerely,



Starla Bahem
Passenger Service Representative

Enclosures

BIKES ON BART PROGRAM

ADMINISTRATION

1. Monitoring Committee - A Committee comprised of representatives from the Passenger Service; Field Service; BART Police; Insurance; Safety; Planning; the East Bay Bicycle Coalition (2 members) and the San Francisco Bicycle Coalition (2 members) will monitor the use of bicycles on the trains and review any complaints to determine if a permit should be revoked.
2. Hours of Use:

Non-Commute Hours:

Bicycles will be allowed on the trains before 6:30 a.m. and from 9:00 a.m. to 3:30 p.m. and after 6:30 p.m., Monday through Friday.

Commute-Hours:

Between 6:30 a.m. and 9:00 a.m. Monday through Friday.

Concord Line - Cyclists may only travel east on the Concord Line from the Rockridge Station to Orinda, Lafayette, Walnut Creek, Pleasant Hill and Concord Stations.

Fremont Line - Cyclists may only travel south on the Fremont Line from the Lake Merritt Station to Fruitvale, Coliseum, San Leandro, Bay Fair, Hayward, South Hayward, Union City and Fremont Stations.

Richmond Line - Cyclists may only travel north on the Richmond Line from the Ashby Station to Berkeley, North Berkeley, El Cerrito Plaza, El Cerrito Del Norte, and Richmond Stations.

Between 3:30 p.m. and 6:30 p.m. Monday through Friday.

Concord Line - Cyclists may only travel west on the Concord Line from the Concord Station to Pleasant Hill, Walnut Creek, Lafayette, Orinda and Rockridge Stations.

Fremont Line - Cyclists may only travel north on the Fremont Line from the Fremont Station to Union City, South Hayward, Hayward, Bay Fair, San Leandro, Coliseum, Fruitvale, and Lake Merritt Stations.

Richmond Line - Cyclists may only travel south on the Richmond Line from the Richmond Station to El Cerrito Del Norte, El Cerrito Plaza, North Berkeley, Berkeley, and Ashby Stations.

There will be no hourly restrictions for bicycles on Saturdays, Sundays, and holidays, however, when special events cause a crowded condition on the trains platforms, line personnel may refuse entrance to the system until there is sufficient room.

RULES AND REGULATIONS
PERTAINING TO BICYCLES ON BART

1. Only bicycles that are no longer than 80 inches and no higher than 48 inches and two-seat tandems that are no longer than 96 inches and no higher than 48 inches are allowed on BART. No motor powered bikes allowed.
2. Bicycles must be kept clean and free of dirt and grease.
3. Bike permits must be shown to Station Agent when entering station.
4. HOURS: Non-Commute: Before 6:30 a.m.; from 9:00 a.m. through 3:30 p.m. and after 6:30 p.m. (Monday through Friday).

Commute: In morning (6:30 a.m. - 9:00 a.m.), Rockridge to Concord; Lake Merritt to Fremont; Ashby to Richmond. In afternoon (3:30 p.m. - 6:30 p.m.), Concord to Rockridge; Fremont to Lake Merritt; Richmond to Ashby (Monday through Friday). No hourly restrictions on weekends and holidays. (See BIKES ON BART PROGRAM, under "Administration")
5. Use only stairs and elevators. Absolutely no bicycles on the escalators.
6. Always walk bicycle in stations.
7. Except when entering and exiting the paid areas, never leave bicycle unattended.
8. Wait towards the rear of the platform for trains.
9. Before boarding train, allow other persons to enter and exit.
10. Bicycles are only allowed in the rear section of the last car of a train (see diagram in BIKES ON BART PROGRAM).
11. Bicycles must be held at all times while on the train. The kick stand of the bicycle must remain up.
12. Bicycles must at no time block any portion of the train doors.
13. In case of an emergency and evacuation is necessary, please leave bike on train.
14. Do not chain bicycles to poles, light fixtures, pillars, etc. inside the BART station. All bicycles are to be parked outside the station in the free area in either the bicycle racks or lockers. For locker information, please call 465-4100, ext. 569.
15. Expired bike permits will be confiscated by Station Agents.

VIOLATION OF ANY OF THE ABOVE RULES IS CAUSE FOR REVOCATION OF PERMIT BY THE MONITORING COMMITTEE.

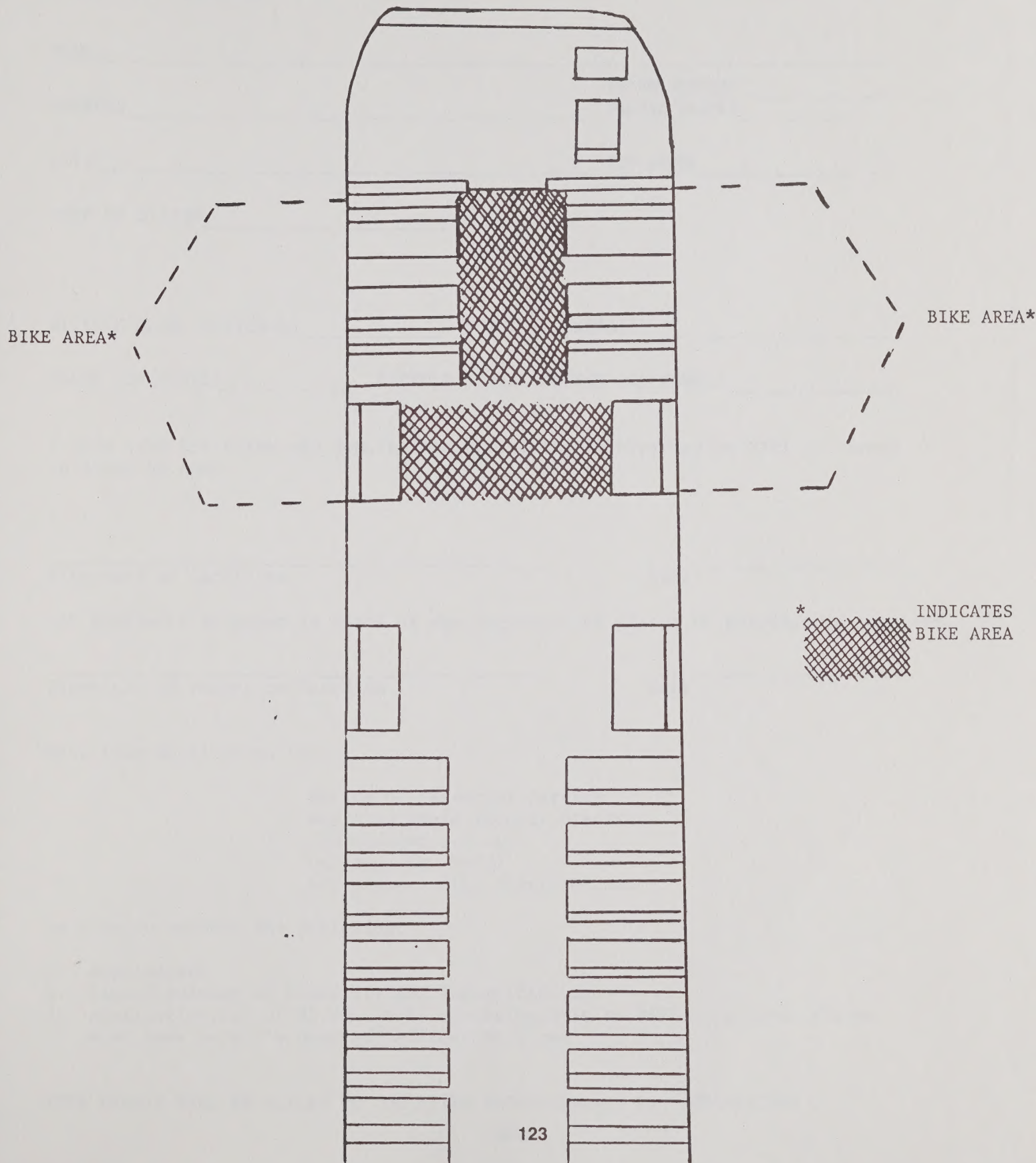
3. Policy - Currently, folding bikes and those which are enclosed in a suitable carrying bag are permitted on the system at all times, and no permit is necessary. All other bicycles must have a permit.
4. Registration - A permit system will be established for control purposes and to limit participation to those who meet the permit requirements. The number of permits issued will be related to capacity of the system to accommodate bicyclists.
5. Permits - Permits will be issued to those who are age 14 and above and to those who are under 14 if accompanied by an adult (18 years or older) at the time of usage. If under 14 when using BART, they must have one adult per two children. Permits will be valid for approximately three years and expire on the holder's birthday. It is the responsibility of the bike permit holder to renew his/her permit within sufficient time of the expiration date.
6. Fees - The fee will be three dollars (\$3.00) per bicycle, non-refundable and is due at the time the permit is issued.
7. Liability - A waiver, indemnifying and releasing the District from specified liabilities, will be given to each person and must be signed at the time of issuing a permit. Persons under the age of eighteen (18) must have their waiver signed by a parent or guardian.
8. Revocation of Permit - A list of rules is attached. If a person is observed breaking rules, an Unusual Occurrence Report will be written by Transportation personnel or a Police Report by Police Services. The report will list the person's name and permit number. Violations will be reviewed by the Monitoring Committee. If justifiable, a letter will be sent to the violator to revoke the permit. Revoked permits will be listed by number and circulated to agents. Agents will be instructed to refuse entrance to those who are listed. On the line, Police Services may confiscate a permit.

TRANSPORT PROCEDURES

1. Vertical Circulation - Bicyclists should gain access to concourse and platform levels by means of stairs or elevators. Under no circumstances will escalators be used.
2. Ticketing - Entrance and exit must be via primary station agent in multi-booth stations. Cyclists should park bike near the service gate, show agent his/her permit, process own ticket through gate, pass through service gate, and return with bike through service gate.
3. Boarding Train - Rear area of last "A" car (see diagram) will be designated for cyclists. All patrons will be advised by means of train destination signs that bicyclists are to board last car only. No more than seven bicycles are allowed on each train. Cyclists must wait to board until exiting patrons/cyclists have cleared doorway. While riding, either seated or standing, cyclists must hold onto bike and leave kick stand up.

If designated area is fully occupied, either with patrons or bicyclists, cyclists on platform must wait for next available train.

4. Bike Pass shall be shown to any BART employee upon request.



BIKES ON BART PERMIT APPLICATION

PLEASE PRINT OR TYPE

NAME _____

ADDRESS _____ PHONE (HOME) _____
PHONE (WORK) _____

CITY _____ ZIP CODE _____

DATE OF BIRTH* _____

BICYCLE MAKE (OPTIONAL) _____ MODEL (OPTIONAL) _____

COLOR (OPTIONAL) _____ BICYCLE SERIAL NUMBER (OPTIONAL) _____

I have read the Rules and Regulations pertaining to bicycles on BART and agree to abide by them.

Signature of Applicant Date

*If applicant is under 14 years of age signature of parent or guardian is required.

Signature of Parent or Guardian Date

Mail this application to:

Office of Passenger Service
Bay Area Rapid Transit District
800 Madison Street
Oakland, CA 94607
Attention: Bike Permit Office

Be sure to enclose the following:

1. Application
2. Signed Release of Liability and Indemnification
3. Application fee of \$3.00. Make checks payable to BART. Personal checks must have person's name and address on them.

YOUR PERMIT WILL BE MAILED TO YOU AFTER PROCESSING OF THE APPLICATION

RELEASE OF LIABILITY AND INDEMNIFICATION

Release:

In consideration of the permission granted to me to bring my non-collapsible bicycle onto a BART car while riding on the BART system as a passenger, I hereby release the San Francisco Bay Area Rapid Transit District, its directors, officers, representatives, agents and employees from any and all liability for injury of any kind to me or to my bicycle or other property I may have with me, incurred by reason of any act or failure to act on my part, or by reason of any act beyond the control of BART's directors, officers, representatives, agents and employees, and arising because of my bringing my bicycle on BART property.

Indemnification:

I further agree to indemnify and hold harmless, the San Francisco Bay Area Rapid Transit District, its directors, officers, representatives, agents and employees from all costs, damages or expenses, direct or indirect, for injury to other persons and/or their property, and/or damage to BART property, including but not limited to, loss of use, incurred by reason of any act beyond the control of BART's directors, officers, representatives, agents and employees, and arising because of my bringing my bicycle on BART property.

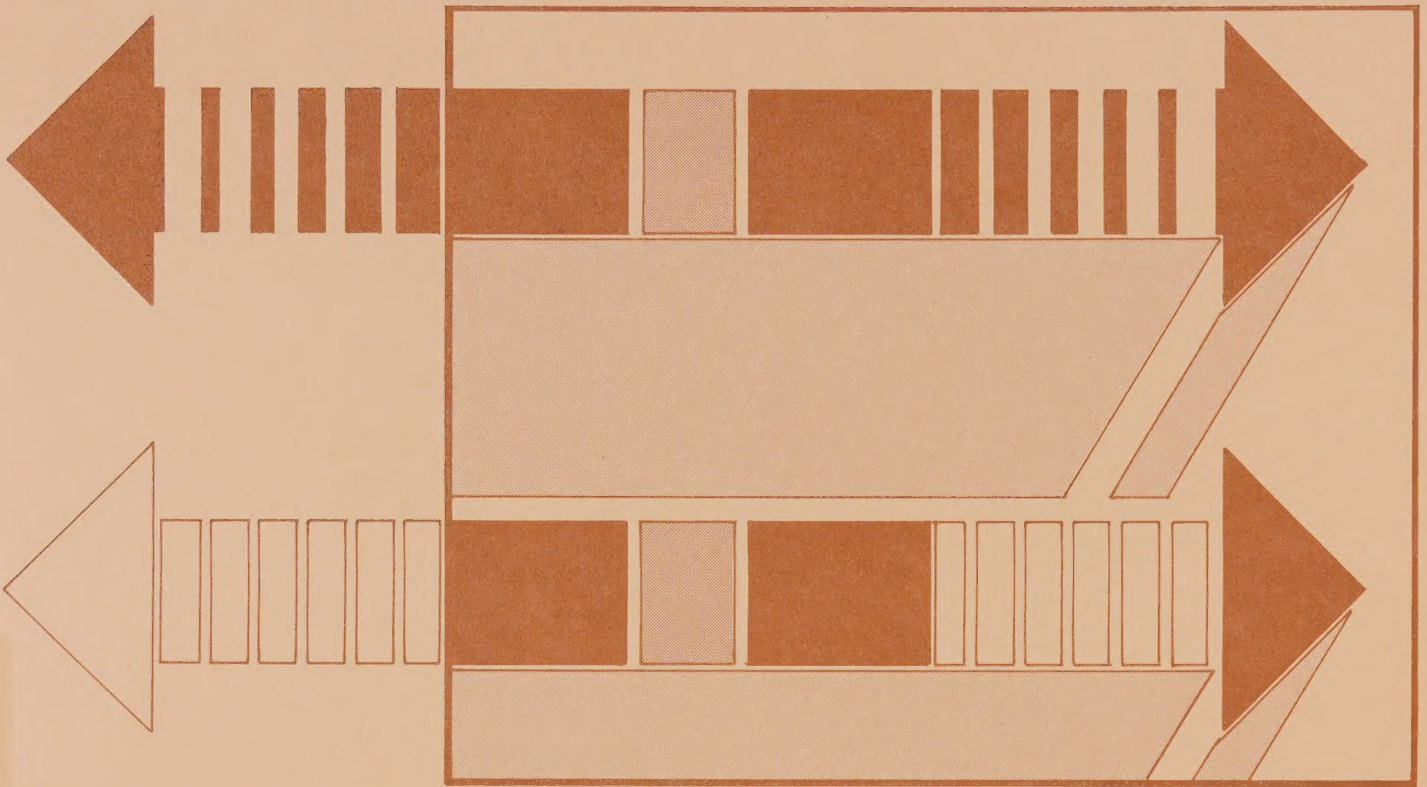
(Signature of Permittee)

(Date)

If applicant is under 18 years of age signature of responsible parent or guardian is required.

(Signature of responsible parent/guardian)

(Date)



Alternative work schedules help employees avoid congestion and improve opportunities for ridesharing and transit use.

CHAPTER 4

ALTERNATIVE WORK HOURS

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SUMMARY AND DEFINITION

The majority of Bay Area workers start work at 8:00 or 8:30 a.m. and finish at 5:00 p.m. The “eight-to-five routine” accounts for traffic peaks and the severe congestion experienced each morning and evening. Alternative work schedules — staggered hours, flexible hours and the four-day work week — can help employees avoid the periods of worst traffic congestion and transit crowding.

Spreading the demand for travel over time is also a good way to make more efficient use of buses and roads. The existing bus fleet and road network could serve more commuters without additional investment in peak capacity needed only for the rush hour — if work arrivals and departures were staggered over a wider band of time. Spreading demand is particularly important for transit efficiency because it is extraordinarily costly to put buses in service for one run each morning and evening and then withdraw them from service during the midday. Transit economics argue for filling empty seats before adding more rush-hour service with little potential for attracting midday riders. Building flexibility into working hours also makes it easier for workers to schedule carpools and vanpools, and to meet bus schedules.

Thus, a new schedule is a commute alternative. It allows employees to improve both the *quality* of their commute and the *convenience* of the scheduling connections that frequently deter carpooling and transit use.

Staggered Hours

With staggered hours, different work groups are assigned to begin work at different times. Once the schedules are assigned they are maintained and punctuality is required. Spacing arrivals at specified intervals before and after conventional business hours allows workers to travel at times when traffic moves freely and seats are available on transit. Staggered hours work well for assembly-line operations and multiple-shift production.

Flex-time

Flex-time is a newer scheduling practice that allows individual employees to choose their *own* schedules within company-set guidelines. Most flex-time arrangements allow employees to begin work as early as 7:00 a.m. or as late as 9:30 a.m., and many allow workers to vary their arrival times from day to day. Most flex-time programs allow employees to adopt a new schedule when their needs change. Variable arrivals provide workers with the leeway to experiment with carpooling and transit use, then settle into a regular ridesharing routine. Flex-time works well for office workers, including technical and clerical employees.

Compressed Work Weeks

Four-day work weeks allow employees to complete 40 hours of work in four 10-hour days. The bonus for employees is an extra day off each week, although not necessarily Friday or Monday. This system is often called “4-10-40” or “4-40” for short. Four-day systems have a double impact on travel to work: one day of commuting is eliminated each week; and the early arrivals and late departures built into ten-hour days mean that employees travel before and after the rush-hour peaks.

The failure rate for 4-40 programs, is, unfortunately, far higher than for flex-time or staggered hours. Among the most frequently cited reasons for discontinuing 4-40 systems: worker fatigue; difficulty scheduling meetings and maintaining effective coverage; and employee dissatisfaction based on difficulty in scheduling family activities.

The form of compressed work week that is spreading most rapidly allows one day off after nine eight-hour days. This plan fits with the trend toward 36-hour work weeks. Unless paired with flex-time or staggered hours, this system does not shift travel out of the peak period. But it can reduce the number of work trips by one tenth.

The following sections will discuss in detail flex-time and staggered hours, as they are the most common and workable alternative work hour options.

Benefits: Flex-time

Flex-time allows individual employees to set their own working hours within limits established by company policy. In practice, this usually means employees gain the leeway to begin work as early as 7:00 or as late as 9:30 a.m. The benefits of flex-time accrue to the employee, the organization, and the community. Employees benefit from the ability to splice together a schedule that suits work, commuting and home life more conveniently. Family emergencies and personal needs can be accommodated without an employee's being docked or reprimanded for tardiness. Employers benefit from reduced absenteeism, reduced turnover and increased productivity. The community benefits from the easing of rush-hour traffic congestion and transit crowding.

The transportation logic of flex-time is only one argument for adoption, but it is a persuasive one. Transit's effective capacity could be increased at minimum cost if enough firms adopted flex-time. After flex-time is introduced, more employees usually begin to carpool and use transit. In Seattle, a survey of employees recently placed on flex-time showed a decrease in the percent who drive alone from 24 percent to 14 percent. Among employees in San Francisco's financial district, the percent who drive to work alone fell from 3.5 percent to 1 percent after flex-time was introduced. (This information is based on surveys conducted by Dr. David Jones of the University of California, Berkeley.) Clearly, flex-time offers the scheduling flexibility needed to meet bus schedules and arrange carpooling more conveniently. Flex-time also improves the quality of the commute. On the average, employees who drive or carpool save 10 minutes of commute time each way because flex-time allows them to avoid the period of heaviest congestion. Auto commuters also save gasoline because less time is spent idling in heavy traffic, making frequent stops and starts. Finally, flex-time would allow employees to cope with sporadic gasoline shortages with less inconvenience and lost work time.

These arguments may appeal to the transportation coordinator, but company management may be more concerned about performance and productivity. Managers need to know that the system can be supervised and that it will produce "bottom-line" returns.

Some of the benefits of flex-time from the organization's point of view are:

- **Reduced absenteeism.** Scheduling flexibility reduces one-day sick leaves that are a cover for tardiness or personal emergencies.
- **Reduced turnover.** Substantial turnover occurs when employees can't change schedules to accommodate the changing needs of children or spouses.
- **Improved performance on the job.** Different employees have different biological clocks. Some work better early, others late.
- **Improved cooperation.** It takes cooperation and communication to make scheduling flexibility work; most employees will invest the effort to make it work.
- **An edge in recruiting.** Scheduling flexibility is a valued fringe benefit.

- **Improved community relations.** The company is doing its part to mitigate traffic congestion and transit crowding.

These benefits have been validated by a survey of some 250 companies with flex-time. Table 14 reveals a wide range of favorable results:

TABLE 14
FLEX-TIME BENEFITS

Benefits	Percentage of Organizations Reporting This Result
Improved employee morale, satisfaction, quality of life	97%
Reduced tardiness	84
Easier commuting	77
Reduced absence	73
Easier recruiting	65
Reduced turnover	53
Improved productivity, service	48
Reduced overtime	44
Good public relations	43

Source: Stanley D. Nollen and Virginia H. Martin, *Alternative Work Schedules, Part 1: Flexitime, An American Management Associations Survey Report*.

Benefits: Staggered Hours

The main benefit of staggered hours to an organization is the relief of a congestion problem. By adopting earlier or later hours than nearby companies, a company allows its employees to avoid the worst periods of traffic congestion or transit crowding. Large companies may also stagger hours to alleviate on-site crowding at plant gates and elevators.

Selecting an Appropriate Scheduling Policy

One of the most important questions in the selection of an alternative work schedule is how much flexibility? For example, will employees be allowed to:

- Select one of several staggered shifts? Change assignments if necessary?
- Select any starting time from, say, 7:00 to 9:30 a.m.?
- Arrive at different times from day to day? With or without prior approval?
- Store up credit hours for an early departure on, say, Friday?
- Work 10 hours a day but only four days a week?

The evidence on productivity, job satisfaction and commute impacts all recommend a scheduling policy that allows the maximum individual scheduling flexibility consistent with job requirements and work performance. The amount of actual flexibility that is feasible within such a policy is usually determined through planning at the division or work-unit level.

Table 15 shows the different scheduling practices that are in current use.

How much flexibility is workable depends on the job and the work environment. The assessment of job performance and coverage requirements is the critical first step in the selection and design of an alternative work schedule.

TABLE 15
DEFINITION OF SCHEDULE TYPES

SCHEDULE TYPE	TYPICAL PRACTICE
Staggered Hours	
Unit-by-unit	Divisions within a company are assigned different hours to spread the demand on roads, elevators or cafeteria space. Employees are required to stick to a schedule once shifts have been assigned.
Company-by-company	Companies within an industrial park or office tower adopt different hours. Employees may be offered the option of keeping their present hours.
Flex-time	
Employee-chosen	Employees choose their own arrival times between 7:00 and 9:30, but must report punctually at the same time each day. Periodic schedule changes may be allowed. Start times as early as 6:30 are acceptable to a surprising percentage of employees.
Flexible starts	Employees choose their own arrival times and may vary them from day to day. Punctuality is redefined in terms of job performance.
Flexible hours	Employees may vary their starting times and the length of their lunch break. In some cases, they may accumulate credit hours that can be banked for Fridays off or personal holidays.
Compressed Work Week	
Fridays off	Employees work 40 hours in four days with Fridays off. Or employees work nine days in two weeks.
Rotating days off	Employees work 40 hours in four days, rotating the responsibility to work Fridays and Mondays. This can also apply to a "nine-days-in-two-weeks" program.

The following factors limit the amount of flexibility possible:

- Work is machine-paced, and equipment downtime costly.
- Work flow is sequential with one person's output becoming another's input.
- Tasks must be completed at a specific time of day.
- Tasks require extensive teamwork (the reason for "core time" — time when all employees must be on the job).
- Interfacing with other units is necessary at the beginning or end of the work day.
- Work loads peak at the end of the work day.
- The business involves considerable customer-initiated contact.

These constraints mean that only limited flexibility can be built into most assembly-line work and consumer retailing. However, it is likely that some choice of shift assignment is possible. Most office work can be organized so that substantial flexibility can be granted to most employees, including technical and clerical workers.

SUCCESS STORIES

Staggered Hours at Lockheed

Lockheed Missiles and Space Co. in Sunnyvale has an ambitious staggering plan that begins with 6:30 a.m. shift assignments.

The plan was developed with worker and union concurrence and has one of the widest arrival spreads in current use. The plan is voluntary in that workers can choose between conventional hours and an assigned slot within the stagger plan. Building voluntarism and flexibility into the plan made it readily acceptable to both employees and their union representatives.

Most employees have chosen the earliest possible stagger option, freeing part of the afternoon for personal business or family affairs. Most workers report a significant improvement in the quality of the commute. Lockheed managers suspect staggered arrivals have disrupted some carpools, but a vigorous "find-a-replacement-program" compensated for most such cases.

Flex-time at Metropolitan Life

Metropolitan Life Insurance in San Francisco allows its regional headquarters workers to choose their own work-start times and vary them somewhat from day to day. Employees still work seven hours and 45 minutes daily, but can arrive as early as 6:30 or as late as 10:00 a.m., depending on the department and type of work they perform.

Most employees choose to arrive at work early. Over half are on the job by 7:30 and three-fourths by 8:00 a.m. Only 12 percent have continued to commute during the half-hour at the "peak of the peak." In 1980, almost half of Metropolitan's employees saved 10 minutes each trip to and from work, and 27 percent saved more than 15 minutes each way. Since flex-time was introduced, transit use has also increased.

FLEX-TIME

Worker productivity, job satisfaction and commute impacts all argue for a scheduling policy that gives individual employees flexibility in the choice of their working hours. Most companies adopt flex-time policies that allow choice provided job performance and work coverage are maintained.

Adopting a new scheduling policy is only the first stage of implementation. An implementation and education process supervised by a special project manager is usually necessary to see policy through to practice. Planned implementation is also necessary to ensure coordination between groups with different schedules and to equip supervisors to manage the conversion to new procedures.

It's hard to fail with flexible schedules when they are appropriately matched to the work environment. In fact, only 8 percent of those companies which try flexible schedules later return to fixed hours. But some organizations do achieve more benefits and experience fewer problems than others. The key to maximizing benefits and minimizing problems is the care taken during implementation.

The following is a step-by-step guide to an eight-stage implementation process:

1. Assess feasibility.
2. Obtain approval and appoint a task force.
3. Detail the flex-time experiment.
4. Make critical decisions in the design of a flexible schedule.
5. Set up the program administration.
6. Convert to the new schedule.
7. Evaluate.
8. Maintain the program.

ASSESSING FEASIBILITY

The first step in implementing flex-time is to gather information about flex-time. Attend a course, read some books, talk to project or personnel directors in organizations that already use flex-time. (References and Contacts appear at the end of this chapter.) The flex-time administrator should also make an organizational analysis, considering environmental, technical and human factors.

Environmental Factors

There are several factors that should be considered in assessing the feasibility of flex-time within a particular company:

- Could flex-time give the company an advantage in a tight labor market?
- Will wage and hour laws limit the flexibility of the system that can be used?
- Are traffic jams on access roads or elevators and/or irregular transit service causing tardiness problems?

- Can flex-time be used to support a company carpooling program? (Flex-time will disrupt some carpools and facilitate others. The net impact is usually favorable.)

Technical Factors

Examine each work unit separately and consider whether its technology is compatible with flex-time.

- Are the predominant jobs so interdependent that early arrivers could not begin work on their own, or would a little quiet time at one end of the day enable workers to perform tasks that take concentration more efficiently?
- Is demand such that all work stations must be fully staffed throughout the traditional business day, or could service be improved by extending the length of the operating day?
- Is the staff large enough to provide coverage for a longer workday?
- Is work too specialized and highly skilled to permit workers to substitute for one another?
- Could most people in the work unit be included in a flex-time program?
- Could most work units in the organization use flex-time, or would it be feasible in only a few areas?

Human Factors

There are several factors to consider in assessing the acceptability of a flex-time program within the organization:

- How much support will top management give to a flex-time program?
- Are some supervisors skeptical of flex-time? (Holding a briefing for supervisors is a good way to inform them that a feasibility study is being made, to learn about factors that they think should be taken into consideration in assessing feasibility, and to learn how many would like to have their work units included in an experimental program.)
- Are union leaders agreeable to an experiment? Will a collective bargaining agreement have to be modified?
- Are there any national or international union policies that will impinge on using forms of flex-time that offer more variability?
- Do employees favor a change? (An employee survey form that could be used to ascertain employee interest and gather information that would be useful in the planning process is included in the Appendix. Alternatively, employee meetings could be held or a memorandum or the company newsletter could be used to describe flex-time and solicit employee comment.)

OBTAINING APPROVAL AND APPOINTING A TASK FORCE

The coordinator should formulate recommendations and present them to top management and union leaders for consideration. At this point, the coordinator should have drafted a policy supporting flex-time and a work plan for the design and implementation of the program for management approval.

The coordinator should also appoint a project director and a task force to assist in developing the program. The transportation coordinator may direct the project, or it may become the responsibility of the personnel department. The task force is a planning committee composed of a "slice" of the organization. Make sure that someone who was active in making the feasibility study and a representative of the personnel department are included, as well as officials of any unions that will be involved. Involving people at

all levels of the organization allays any uneasiness about the flex-time program by giving everyone someone to go to for information. Include representatives from major work units. The committee may want to form subcommittees to concentrate on different aspects of the planning process. The task force organization should also be approved by management.

As the work of the committee progresses, the project director may need to return to management periodically for approval of program details.

DETAILING THE FLEX-TIME EXPERIMENT

It is best to start with a trial flex-time program. The task force should define the scope of the program — How long will the experiment last? What units will participate? The committee will also need to develop a method of evaluating the trial program. This means stating flex-time objectives evaluation criteria and collecting “baseline” data describing the situation before conversion to flex-time. For example, data on the hours of overtime worked, number of one-day absences, and employee travel choices will be needed to evaluate the program.

MAKING CRITICAL DECISIONS IN THE DESIGN OF A FLEXIBLE SCHEDULE

The 11 most critical decisions involved in designing a flex-time program can be posed as a series of questions:

1. **The length of the company work day:** When will it begin and end?
2. **“Core time”:** What common hours are all employees expected to be on the job?
3. **Flexibility:** How much room for choice will each employee have?
4. **Variability:** How much will employees be allowed to vary their schedules from day to day?
5. **Each employee’s workday:** Will its length change?
6. **Eligibility:** Which employees will be eligible to “flex”?
7. **Supervisory discretion:** How much schedule control will supervisors retain?
8. **Training for supervisors:** What help will supervisors be given in learning the new roles that flex-time requires them to play?
9. **Coverage:** How will it be assured?
10. **Timekeeping:** How will records be kept and abuse be discouraged?
11. **Degree of Flexibility:** Should your company have a fully or moderately flexible system?

The “right” answer to each of these questions will vary from company to company — and may well differ from division to division *within* a company. But options can be described.

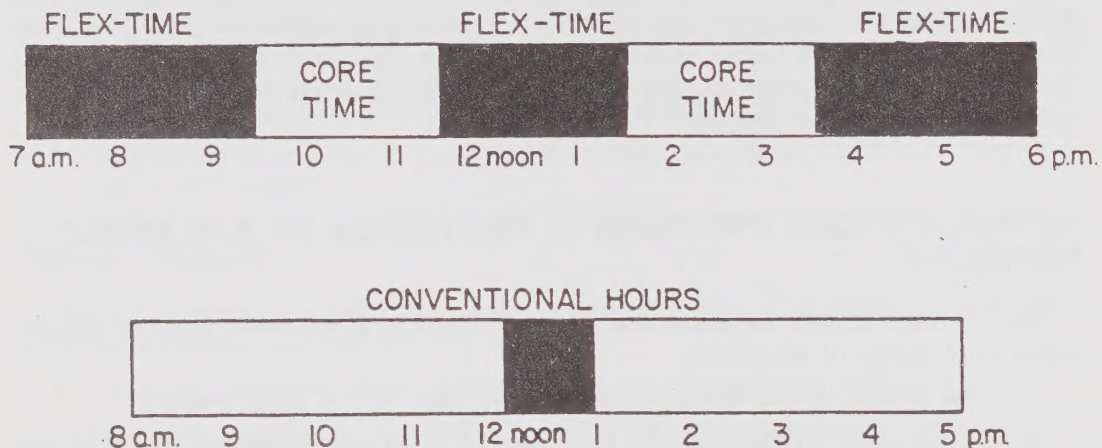
1. The Length of the Company Workday

Flex-time expands the company workday. The most frequently adopted flex-time workday extends from 7:00 a.m. to 6:00 p.m. A more restricted span does not allow employees to avoid a significant amount of traffic congestion. Neither does it reduce short-term absenteeism appreciably, because employees do not have enough time to attend to personal business before or after work. Extending the workday to 7:00 a.m. also improves telephone communication with the East Coast. A longer span could raise

several complications: pay differentials for evening hours; building security; increased lighting and heating costs; and reduced overlap between the schedules of early and late-arriving employees.

2. "Core Time"

"Core hours" are the company hours during which all employees are expected to be on the job. Typically, "core time" extends from 9:30 to 11:30 a.m. and from 1:30 to 3:30 p.m. Extending the span of the company workday earlier than 7:00 or later than 6:00 p.m. would serve to erode core time. Thus, most companies opt for a workday similar to that illustrated below:



The previous diagram could be read in a fashion that suggests the common workday shrinks to four hours. This is not the case. In practice, according to a study by Stanley Nollen and Virginia Martin of over 100 organizations nationwide adopting flex-time, most employees choose to come to work early (65 percent; as contrasted to 1 percent who come in later, 19 percent who vary their arrival times from day to day, and 15 percent who make no change at all in their hours). (All subsequent statistics refer to the same study.) The vast majority of employees are on the job together for six to seven hours.

3. Flexibility

Selecting the span of the company's workday and its "core time" determines the hours within which employees are allowed to choose personal arrival times. This "window" of allowable arrival times typically extends from 7:00 a.m. to 9:30 a.m. This offers sufficient room for employees to avoid congestion and attend to personal needs without eroding the schedule overlap needed for meetings and work flow.

The majority of companies adopting flex-time allow employees to vary the length of their lunch period. This adds another dimension of flexibility to both the lunch period and quitting time. Typically employees settle into a regular lunch-time routine even when they have the choice of varying the lunch period from day to day. The routines that develop mean that little predictability is lost by establishing a flexible lunch hour, yet considerable improvement in short-term absence and employee satisfaction can be achieved.

4. Variability

Most flex-time programs (80 percent) allow employees to vary the time they start work each day. A smaller number (51 percent) allow them to vary the length of the lunch period. A still smaller number (28 percent) allow them to vary the number of hours worked each day so long as 40 hours are worked each week. Only 8 percent permit employees to carry over or borrow hours from one week or pay period to the next.

Even when full variability is permitted, most employees (75 percent) adopt a regular routine — using their full flexibility only when special circumstances arise. Variability is important from a transportation point of view because it provides the leeway to experiment with carpooling and transit use. If transit is occasionally unreliable, variability builds in a cushion for the employee who would otherwise be considered “late.”

5. Each Employee's Workday

Wage and hour laws complicate the implementation of flex-time programs that allow employees to carry “credit” or “debit” hours from day to day or week to week. Therefore, most companies (52 percent) adopt flex-time programs that simply allow the eight-hour day to float early or late by employee choice. Thus, the contract workday and overtime pay procedures are unaffected by most flex-time programs. Table 16 summarizes wage and hour laws that affect the use of flex-time.

6. Eligibility

Flex-time closes the status gap between the scheduling privileges enjoyed by executives and clerical workers. It breaks down corporate “caste systems” in a way that increases job commitment and treats employees as responsible adults. To achieve these results, companies cannot exclude employees from participation in flex-time on the basis of occupational classification. Most companies extend flex-time privileges to all employees except those that perform certain functions. Functions that frequently remain on rigid or staggered schedules are: those that require continuous coverage; shift work requiring precise interface; functions with daily fixed deadlines; sequential tasks performed by two or more employees; and jobs that require extensive communication, coordination, or interfacing within the company or with customers or the public. Many of these functions, however, can achieve flexibility through cooperation among employees within a unit.

7. Supervisory Discretion

Typically, a company's flex-time policy states that flexibility must give way where it conflicts with the requirements of work flow. This means that work-unit supervisors retain a significant degree of control over the actual limits of employees' scheduling choice. It also means that some units can offer flex-time while others adopt staggered hours with fixed arrival and departure times. Differences in the way supervisors interpret work unit requirements and the extent to which they restrict the flexibility conferred by company policy can be arbitrary. Alternatively, restrictions can be entirely reasonable, but *perceived* as arbitrary. Both situations can lead to grievances. In fact, they may be the most difficult problem involved in implementing and operating a flex-time program.

The companies that have coped with these problems most effectively are those that have proceeded with implementation on a gradual and selective basis. Commitment by top management and willingness to arbitrate disagreements are the critical ingredients in solving this most difficult dimension of flexible scheduling.

TABLE 16

WAGE AND HOUR LAWS THAT AFFECT USE OF FLEX-TIME

- **The Walsh-Healey Public Contracts Act** (41 U.S.C. 35) sets basic labor standards for nonexempt employees working on U.S. Government contracts to manufacture or furnish more than \$10,000 worth of goods. Its overtime provisions require payment at time-and-a-half for hours worked in excess of 40 per week or eight per day. Consequently, it is not financially feasible for federal contractors to adopt a variable hours form of flex-time for covered employees. Some contractors use variable hours except when an hourly employee is performing government contract work. Other firms with a standard workday of less than eight hours permit limited debiting and crediting of hours. For example, a firm with a seven-hour standard workday could permit one hour of carryover without incurring overtime penalties.
- **The Contract Work Hours and Safety Standards Act** (U.S.C. 328) applies to U.S. Government construction contracts exceeding \$2,000, service contracts exceeding \$2,500, and supply contracts exceeding \$2,500 but less than \$10,000. It also imposes overtime penalties after eight hours of work.
- **The Fair Labor Standards Act** of 1938, as amended by P.L. 93-259, April 18, 1974, covers most hourly employees engaged in interstate commerce and public administration. It requires payment of overtime at time-and-a-half after 40 hours per week, thus limiting the extent to which it is practical to use a flex-time plan that permits carry over of hours from one week to the next.
- **The Federal Pay Act** (Title 5, U.S.C.) established a basic 40-hour workweek for full-time employees of the U.S. Government and provides payment at time-and-a-half for hours worked in excess of eight per day. Unless an agency would be seriously handicapped in carrying out its function or costs would be substantially increased, tours of duty must be scheduled not less than one week in advance — and whenever possible, on five consecutive days of equal length Monday through Friday. These provisions limit the use of flex-time except in those agencies currently participating in the Federal Alternative Work Schedules experiment authorized by P.L. 95-390, the Federal Employees Flexible and Compressed Work Schedules Act of 1978. The U.S. Office of Personnel Management is evaluating agencies' three-year experiments with these work schedules and will make recommendations to the U.S. Congress regarding permanent change in Title 5 and the Fair Labor Standards Act to remove constraints to use of compressed work-weeks and more variable forms of flex-time for Federal employees.
- **California labor codes** require payment of overtime after eight hours for nonprofessional, nonmanagerial workers within the private sector unless the work unit votes for a four day week, 10 hours a day scheduling arrangement. The administrative interpretation of the California Code is currently being litigated.

8. Training for Supervisors

Although supervisors typically anticipate far more problems with flex-time than actually materialize, their apprehension is not altogether unwarranted. Thirty-five to 40 percent of users report that work scheduling and/or communication become more difficult after flex-time is adopted. Consequently, flex-time creates a need for better management. Preliminary meetings should be held for supervisors during which they can voice their concerns and develop solutions to expected problems. Research shows that when organizations hold meetings for supervisors and appoint internal project directors to whom supervisors can go for help, scheduling and communication problems develop far less often.

9. Coverage

To avoid work coverage problems, supervisors should carefully analyze work flow and arrange necessary coverage prior to conversion to the new work schedule. An instrument that can be used to make this analysis is presented at the end of this section. Supervisors who ask the help of their subordinates in thinking through the kind and amount of coverage that will be needed throughout the workday find that their employees understand the necessity for possible limitations on their personal flexibility. In order to enjoy the benefits of flex-time, they are willing to take whatever steps are required to assure adequate coverage.

10. Timekeeping

When employees vary their work times, each individual needs a record of the hours he or she has worked in order to know how many more hours are due. Additionally, wage and hour law requires employers to maintain a record of the time worked by their hourly employees.

Timekeeping may be accomplished manually or with special time clocks or electronic timekeeping systems. A list of firms that market timekeeping equipment is provided in the Appendix. Equipment can be installed on a rental basis for a trial period prior to purchase.

Regardless of whether a manual or mechanical method is used, management attention must shift from punctuality to performance when flex-time is instituted. Supervisors should establish minimum performance and output standards, charge employees with meeting those standards as a condition for retaining flex-time, and evaluate performance against those standards.

Very few employers (10 percent) report employee abuse problems, such as cheating on time worked or failure to work in the absence of the supervisor. But neither is flex-time a panacea. Supervisors agree that the employees who cheated under conventional hours are the same ones who cheat under flex-time. Most organizations take the precaution of stating in their employee guidelines that the flex-time privilege will be withdrawn from those who abuse it.

Table 17 summarizes the advantages and disadvantages of the various timekeeping methods.

11. Degree of Flexibility

The few studies that compare the effects of limited and fully flexible applications show that the more variable plans deliver a larger number of business advantages. The potential for reducing overtime and short-term absence is greater when employees have more latitude to adjust their schedules to work demands or personal problems. In some work situations, this much uncertainty could seriously impair work flow, but in most cases allowing maximum flexibility creates no problems simply because employees seldom use it. Most people find their own optimum schedules and follow them daily

TABLE 17
FLEX-TIME TIMEKEEPING METHODS

- **Manual Systems.** These are either sign-in/sign-out sheets kept near the entrance to the work unit or individual time sheets or cards maintained by employees.
 - Advantages:
 - Low capital investment
 - Indicates trust in employees
 - Disadvantages:
 - High administrative cost to calculate hours worked
 - No running total of hours worked to advise employees where they stand toward filling the total commitment
 - Possibility of cheating
- **Conventional Time Clocks.** These are mechanical clocks that punch arrival and departure times on each employee's time card.
 - Advantages:
 - Low capital investment
 - Provides objective record of hours worked
 - Disadvantages:
 - Psychological stigma associated with "punching in"
 - High administrative cost to calculate hours worked
 - No running total of hours worked
- **Electronic Systems.** Each employee has a card bearing his/her own identification number that is inserted in a computer terminal installed near his/her work place to record arrival and departure times.
 - Advantages:
 - Provides an objective record of hours worked, authorized absence, overtime, time allocation, etc.
 - Computer can also report core time infringements, calculate pay, indicate debit or credit hours
 - Card can also serve as a security pass
 - Disadvantages:
 - High capital investment
 - No visual record of hours worked if the system lacks direct computer link

unless something unusual happens. Thus, maximum flexibility is used like an insurance policy that can be called upon when needed. Moreover, carpools encourage conformity in work hours. Instituting carpooling and flex-time programs simultaneously produces more conservative flex-time in practice even though a liberal variant of the system has been adopted as policy.

Perhaps the best advice is to start somewhat conservatively, because it is easier to grant privileges than to take them away. Operating guidelines for both a "modest" and "full" flex-time program are included in the Appendix.

SETTING UP THE PROGRAM ADMINISTRATION

Several things need to be done to prepare for flex-time implementation:

Develop the Timekeeping System

Order timekeeping equipment if it is to be installed or develop a manual timekeeping system and print any forms that are necessary.

Make Necessary Support Service and Building Operations Adjustment

Several factors need to be taken into consideration:

- Will the cafeteria have to open earlier for breakfast?
- How will emergency health service be provided for a longer workday?
- Will the library remain open for longer hours?
- Will the hours of the security force need adjustment?
- Will building heating, cooling and ventilation be needed for longer hours?

Make Necessary Transportation Adjustments

The transportation coordinator and the flex-time project task force should work together to anticipate the transportation effects of flex-time and to prepare a response. The following are some of the transportation considerations:

- Will employees who choose different work schedules need help in forming new carpools?
- If large numbers of employees indicate that they will select earlier schedules, will traffic lights at plant gates or bus services need adjustment?
- Will parking policies need adjustment? Late afternoon coverage may be difficult to maintain if the best parking spaces go to early arrivers. A suggestion is to reserve preferred spaces for employees who carpool.

CONVERTING TO THE NEW SCHEDULE

When the flex-time experiment is ready to begin, brief supervisors on operating policies and procedures. Hold discussions that prepare them to manage the new work schedule. Explain operating policies and procedures to employees and supply them with written guidelines. Make sure they understand that they must assume responsibility for satisfactory work coverage and completion in return for schedule flexibility.

When management and staff have been briefed, begin the experiment. Monitor the program closely for the first several weeks. Make whatever adjustments are necessary

to fine tune it, but give problems time to solve themselves. Give each work unit responsibility for solving its own local problems.

EVALUATING THE PROGRAM

As the end of the flex-time trial period nears, begin the program evaluation. Collect and analyze data to compare to the “baseline” data. The task force should base a recommendation to continue, modify, expand or terminate flex-time on the findings and seek management approval. Report evaluation results and decisions regarding future policy to employees.

MAINTAINING THE PROGRAM

There are several steps to maintaining the flex-time program:

- Make sure newly hired employees understand the system.
- Make sure employees who transfer understand the practice in their new units.
- Consider a special orientation briefing for newly hired supervisors.
- Consider increasing the flexibility allowed, if a conservative form of flex-time was introduced for the initial trial program.

STAGGERED WORK HOURS

Staggered hours differ from flexible hours in that work hours are assigned different work groups or different companies begin work at different times to relieve peak congestion. Introducing staggered work hours involves roughly equal emphasis on planning and communication. Planning is necessary to design a program that allows employees to avoid the time-period of worst congestion without disrupting company operations. Communication is necessary to ensure that the plan is understood and endorsed by employees, supervisors and top management.

PLANNING

The type of staggered hours program that will work will depend on your company's size and circumstances. It is far easier to design a staggered hours plan for a small company than a large one.

Small Company Programs

The small company does not usually generate a congestion problem of its own, but its employees must cope with crowded buses and heavy traffic generated by proximity to other companies with similar hours. The solution to this problem is relatively straightforward: the company should adopt earlier or later business hours.

Earlier hours are preferred, in part because transit service is reduced sharply after 6 p.m. on many routes. But experience also shows that employees *prefer* to arrive at work earlier, rather than later. Earlier arrivals allow earlier departures and thus more afternoon time for shopping, errands, family affairs, continuing education and community involvement. Employees are usually willing to accept business hours that are earlier — even dramatically earlier — than the current 8-to-5 norm. In fact, later schedules often conflict with home life and child care arrangements and can create difficulties for transit users.

When a company shifts its business hours forward external interfaces may need special attention and adjustment. Here is a checklist of interface problems that could be encountered by a company that adopts an early schedule:

- the frequency of bus schedules;
- product pickup/delivery schedules;
- disruption of husband-wife or multi-employer ridesharing arrangements;
- late afternoon service for customers or clients.

There are several ways to solve these problems:

- provide skeleton coverage during the last hours of the conventional 8-to-5 workday;
- negotiate new bus and delivery schedules; encourage other small companies in the area to stagger hours and jointly negotiate new schedules;
- allow employees the option of conventional work hours. (Experience says that roughly 15 percent of your employees will choose to retain their present work schedules).

To obtain transportation benefit from a staggered hours program, a fairly dramatic schedule shift may be necessary. In many cases, a shift of *at least one hour* will be necessary to allow your employees to travel before congestion peaks. Management and employee representatives may perceive such a large shift as unacceptable to many employees. However, experience does not bear out this concern because the vast majority of employees prefer an early start/early quit schedule to conventional 8-to-5 hours. This argues for building your staggered hours plan around a survey and as much voluntarism as possible. The survey will document preferred starting times. Voluntarism would allow employees to continue working your company's current hours.

Some companies take voluntarism a step further. They allow employees to select an individualized stagger plan. Employees can choose to begin work at 6:30, 7:00, 7:30 or 8:00 a.m., provided production is not disrupted. This differs from flex-time because employees must stick to their selected schedule, but it has some of the same impacts on supervisors and internal scheduling which are detailed in the Flex-time section.

Large Company Programs

Large companies encounter more intricate scheduling problems when they plan for staggered hours. Since they are major traffic generators in their own right, with employees lining up to use elevators and plant gates, large companies usually stagger division by division, unit by unit or floor by floor. This can complicate internal as well as external scheduling. Planning for division-by-division staggering requires an understanding of the flow of work or production within a company. You'll need to know where:

- production is sequential, requiring some tasks to be completed before others can begin;
- production is concurrent, requiring teamwork between different units.

You should consider the interface between production and support services as well as external schedule interfacing. Here is a checklist of potential bottlenecks and problems:

Support service interfacing

- hours of cafeteria operation;
- hours of building security and plant entry control;
- hours of on-site medical services;
- hours of heating, ventilation and lighting;
- hours of reception, computer operations, the mail room, central telephone operation, and other information centers such as the library or personnel records.

External interfacing

- transit schedules;
- product pickup/delivery schedules;
- carpool arrangements among employees from different units;
- customer services;
- telephone contact with eastern time zones.

Large companies located near other large employers can work out cooperative staggering plans. Large companies should also consult with transit operators on schedule interfaces when planning the staggering program.

COMMUNICATION

The acceptance of employees and supervisors is a critical ingredient in the implementation and success of a staggered hours plan. It should be clearly stated at the outset that:

- the objective of the plan is to improve the quality of the commute for as many employees as possible;
- every effort will be made to accommodate individual employees with special needs and scheduling problems.

Participation in the design of the plan is the best assurance of employee and supervisor support. Planning by committee may take longer but it is the best way to dispel mistrust, anticipate problems before they develop, and transfer "ownership" of the program. A survey of preferred arrival times is one way to assure employees that the purpose of the plan is to improve the quality of the commute, and not some hidden management agenda.

Maximum voluntarism is the best assurance that special needs and problems can be accommodated. Voluntarism can be introduced into staggered plans by:

- a choice of staggered shifts;
- special exemption based on individual hardship;
- reassigning tasks or reorganizing work so that employees who prefer to do so can continue working their current schedule.

Voluntarism is the surest way to obtain union support for staggered hours, but voluntarism may not be possible in some production-line units. Asking for a vote of endorsement for a new schedule may be the best way to gain employee support in these circumstances. Contract amendment may also be necessary, a factor that could compel a vote in unionized work units.

Experience says that most employees will be eager to work a new schedule if it allows them to avoid congestion *and* frees late afternoon time for personal business or family life. Thus, the process of communication and consultation can be entered with confidence that employee support will be enthusiastic. On the other hand, planning for staggered hours can collapse if management seeks contract concessions from employees as the tradeoff for an improved commute.

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- Metropolitan Life Insurance Co.
Illene Matteson
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APPENDIX

- Employee Questionnaire and Cover Letter
- Work Analysis Instrument
- Manufacturers or Distributors of Flexible Work Hours Timekeeping Equipment
- Operating Guidelines for a Moderate Flex-time Program
- Operating Guidelines for a Full Flex-time Program
- Seattle Commuter Newsletter, *Capsule*, Special Edition on Flextime Results

EMPLOYEE QUESTIONNAIRE AND COVER LETTER

MEMORANDUM

TO: All Employees

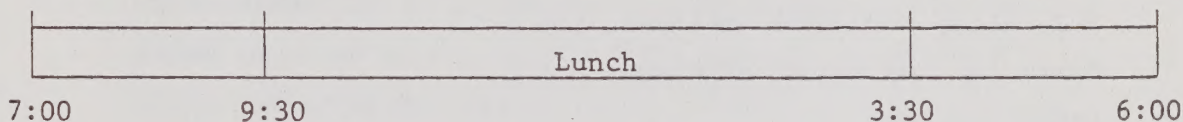
FROM: _____ (a high level executive)

SUBJECT: Flexible Working Hours Feasibility Study

We need your help in deciding whether _____ should consider adopting flexible working hours. PLEASE DO NOT TAKE THIS STUDY AS AN INDICATION THAT USE OF FLEXIBLE WORKING HOURS WILL BE RECOMMENDED. The final decision will depend on a number of factors including this study.

Flexible working hours, a new concept that is also called flexi-time, divides the workday into two different kinds of time: core time in the middle of the day when everyone must be on the job, and flexible time periods at either end during which people may select their own arrival and departure times as long as operations in individual work units are not harmed. Core time, for example, might be from 9:30 a.m. to 3:30 p.m., and flexible time from 7:00 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:00 p.m.

Flexible Time -----Core Time----- Flexible Time



Each employee would work the same total number of hours, but could choose their own combination of core and flexible time. For example, if we adopted the system sketched above, you could work our present hours of _____ a.m. to _____ p.m., or you could select another schedule such as 7:30 a.m. to _____ p.m.

Flexible working hours are being used in a number of organizations in the United States and people have found that having the freedom to choose their own work schedules enables them to commute outside rush hour, shop or enjoy recreational activities during the week, and better meet home responsibilities such as seeing children off to school in the morning or being home when they return in the afternoon. The company benefits too, because people are able to take care of personal business without using leave and perform their jobs better when they come to work in a better frame of mind.

Would you let us know what you think of this possibility? Please complete the attached questionnaire and return it to _____ by _____. Your views as well as those of other employees and managers, will then be considered in deciding whether we should move toward flexible hours.

If, after submitting your questionnaire, you had additional thoughts about flexible working hours here at _____, please send them to _____.

Please return to _____
by _____

EMPLOYEE QUESTIONNAIRE

1. On the whole, my feeling about flexible working hours at _____ is:

I like the idea.....()

I don't like the idea.....()

I'm unsure and would like more information.....()

2. What department do you work in? _____

3. What is your job title? _____

4. I am presently a:

Full time, permanent employee....()

Part-time, permanent employee....()

Other _____

5. I work:

Regular hours....()

On a shift.....() Hours: _____ to _____

6. If flexible working hours were adopted, the following starting time would usually be best for me:

6:00 a.m.()

7:30 a.m.()

9:00 a.m.()

6:15 a.m.()

7:45 a.m.()

9:15 a.m.()

6:30 a.m.()

8:00 a.m.()

9:30 a.m.()

6:45 a.m.()

8:15 a.m.()

9:45 a.m.()

7:00 a.m.()

8:30 a.m.()

10:00 a.m.()

7:15 a.m.()

8:45 a.m.()

Other _____

7. I now eat breakfast in the cafeteria this many times per week:

0 ... ()

2 ... ()

4 ... ()

1 ... ()

3 ... ()

5 ... ()

8. If flexible working hours were adopted, I would probably eat breakfast in the cafeteria this many times per week:

0 ... ()

2 ... ()

4 ... ()

1 ... ()

3 ... ()

5 ... ()

9. I now travel to work by this means:

Public transportation.....()

Van pool.....()

Drive alone.....()

Bicycle.....()

Drive in a car pool.....()

Walk.....()

Drive with someone else ... ()

Other_____

10. a) If flexible working hours were adopted, I would probably travel to work by this means:

Public transportation.....()

Van pool.....()

Drive alone.....()

Bicycle.....()

Drive in a car pool.....()

Walk.....()

Drive with someone else....()

Other_____

b) I would use this form of transportation because_____

11. If flexible working hours were adopted, I think the major advantages for me would be:

12. If flexible working hours were adopted, I foresee the following problems:

Additional comments:_____

Work Analysis Instrument*

DIRECTIONS: This analysis should be made to determine the compatibility of flex-time and functions of your work unit. Before you complete it, read the attached materials to make sure that you understand the flex-time concept. Work and work flow have previously been organized within the confines of fixed hours. If a flexible schedule is adopted, some functions may still need to be performed at specific hours. This form is intended to help you think through the functions performed in your work unit and identify areas where adjustments are needed. Work requirements to consider include:

- Tasks that must be performed by groups of people working together.
- Sequential tasks in which one person's output becomes another person's input.
- Equipment that must be operated or service that must be provided during specific time periods.
- Daily or weekly peak loads.
- Interactions required within the work unit, with other work units, with the public, or with representatives of other organizations, and the times of day that they are required.
- Changes in demand patterns that might result from changed work schedules in other work units.
- Functions that must be carried on outside core hours.

1. Name of work unit: _____
2. Mission of unit: _____
3. Number of positions by job title: _____

* Adapted from U.S. Geological Survey.

Work Analysis Instrument (continued)

4. Recurring functions that must be carried out during a specific time period--explain any that cannot be adequately performed under flex-time.

Number and job titles of persons who carry out these functions:

Describe ways these functions could be carried out under flex-time through coordination of work schedules among people who hold these positions, setting minimum coverage requirements, cross training, team flexibility, or work redesign:

5. Recommended core hours to enable your unit to carry out its mission successfully:

Minimum core hours _____ Specific core hours _____

6. Probable advantages of flex-time for your work unit.

Work Analysis Instrument (continued)

7. Possible disadvantages of flex-time for your work unit:

8. Current methods of measuring productivity in your unit. If none are presently used, describe methods or measures that could be developed to determine the effect of flex-time on your operations:

9. Other comments or considerations:

Signature of work unit supervisor

[Faint, illegible text covering the majority of the page, likely bleed-through from the reverse side.]

Manufacturers or Distributors of
Flexible Work Hours Timekeeping Equipment

Varitime Systems Corporation
21 Tamal Vista Blvd.
Corte Madera, CA 94925
phone: (415) 924-5515

Flextime Corporation
31 Park Road
New Shrewbury, N.J. 07724
phone: (201) 544-1505

Interflex, Inc.
101 Park Avenue
New York, NY 10017
phone: (212) 686-0928

Systematics, Inc.
283 Lincoln Boulevard
Middlesex, N.J. 08846
phone: (201) 469-8700

Cardkey Systems
20399 Nordhoff Street
Chatsworth, CA 91311 phone: (213) 8828111 or (203) 259-8789

Operational Guidelines for a
Moderate Flex-time Program

1. Employees will continue on a 5-day workweek, Monday through Friday. The length of the workday will continue as 8 hours and 30 minutes including a lunch period.
2. Employees may vary their starting times between the hours of 7 a.m. and 10 a.m. assuming productivity, service, and workflow is maintained. Quitting time will be determined by adding 8 hours and 30 minutes to the starting time of each employee.
3. All employees are expected to be at work during the "core hours" which are from 10 a.m. to 3:30 p.m. Normal overtime pay rules will be in effect for any overtime worked beyond the 8 hours and 30 minutes workday.
4. Each weekly employee, exempt or non-exempt, will be responsible to enter his/her starting time each day on the Daily Attendance Register, Form 3222. The starting time should be on a 5-minute basis, such as 7:25, 7:35, 8:10; etc. The employee should initial the starting time each day. The chart below will be useful to determine applicable quitting time. Management of each unit should retain the Daily Attendance Register, Form 3222, for a period of three years as required by federal and state wage and hour laws. The completion of Form B2104 will still be required.

Flexible Working Hours Schedule

<u>If you begin to work at</u>	<u>Your quitting time is</u>
7:00	3:30
7:05	3:35
7:10	3:40
...	...
9:50	6:20
9:55	6:25
10:00	6:30

5. An employee absent on a normal scheduled workday should telephone his or her supervisor as soon as possible. Employee absence because of illness or an unknown reason should be reported to the Medical Department on the Daily Report of Absence Due to Illness or Reason Unknown, Form B psnl. 47a, by 10:30 a.m. of each working day following the current reporting procedures.

All other personnel and salary administration rules not specified above will apply as usual.

Operational Guidelines for a Full Flex-time Program

Flex-time is a concept which allows employees to redistribute their work hours. It does not change the number of hours worked, but does allow more control by the individual employee over when those hours are worked.

The goal is to allow employees the maximum latitude in fixing their schedules. The Company plans to implement a system that will eliminate all unnecessary administrative constraints, leaving only those necessary due to law, organization policy, or the need to be on the job at certain times in order to get the job done.

You will be free to establish the schedule of work times most convenient for you, so long as you:

1. Accumulate the necessary hours during the two-week payroll accounting period (75 hours).
2. Are on the job during core time (9:30 a.m. to 11:30 a.m. and 1:30 p.m. to 3:30 p.m.).
3. Are on the job when necessary to get the job done (determined by each department).
4. Work within the framework of a 7:00 a.m. to 6:00 p.m. business day.

You should also understand that:

1. The basic workweek will consist of 5 days per week, 7½ hours per day average, or 8 hours per day maximum, unless authorized to work overtime.
 - a. Accumulated work time for the week must be at least 35 hours and, without prior approval, should not exceed 40 hours.
 - b. Work breaks for coffee, if taken during a core period, are not to exceed one-quarter hour in duration.
 - c. Lunch breaks will be one-half hour minimum with 2 hour maximum, providing the employee meets the requirements of total hours accumulated and is present during the core time.
2. While the basic goal is to provide employees with a maximum choice with regard to work hours, it may be necessary for the immediate supervisor to adjust an individual's flex-time schedule in order to meet the operational requirements of the department or unit. Time off during the core period in excess of one-quarter hour maximum work break must be approved by the immediate supervisor.
3. No employee will be required to adjust his or her present regular work schedule to hours which will be inconvenient or cause a hardship.
4. Employees off sick must notify the immediate supervisor of the fact prior to 9:00 a.m. If entitled to sick leave, employees will receive work credit of 7½ hours for each work day of sick leave.



the Capsule Relief for Commuter Congestion

VOL. 1 No. 1

SPECIAL EDITION

AUGUST 1980

Survey of Downtown Seattle Reveals . . .

MAJOR REDUCTION IN PEAK HOUR COMMUTING WITH FLEX-TIME!

The Institute of Transportation Studies of the University of California at Berkeley has completed its study of employee travel behavior of eight downtown Seattle employers who operate on flexible working hours (flex-time). The results and the implications of this study could drastically alter future transportation planning. The question in the minds of planners has long been — does flex-time have a positive impact on travel behavior? This study provides a conclusive answer in the affirmative! **Our existing transportation systems would be used more efficiently IF the users of the systems had greater personal latitude in the design of their commute trip. Additionally, the projected implications of this study indicate an immediate need for a broader application of the flex-time concept.** These results were based on employee response from Unigard, The Veterans Administration, Washington Mutual, Sea-First, the U.S. Department of Energy, Industrial Indemnity, Community Services Administration and the Securities and Exchange Commission. A total of 1292 surveys were distributed, 48% (626) were returned and usable.

Flex-time, by definition, implies individual, daily choice — respecting the needs of the work load — as to when the employee begins and ends his work day. However, the range of programs involved in this study is from full flex (individual daily choice) to modified flex (freedom to choose a desired fixed schedule). Encouragingly, this study demonstrates that even with modest application of flexible schedules **EMPLOYEE CHOICE** in work scheduling can have a tremendous positive impact on the use of our transportation system. **Given a**

choice, employees show a definitive shift away from the peak travel times. Below you can observe this dramatic shift. . .

WORK SCHEDULE CHANGES:

(Note decreases during peak travel times)

Starting Times:	Before Flex-time	After Flex-time
before 7:00 a.m.	4.1%	20.9%
7:00 - 7:29	19.1	33.5
7:30 - 7:59	39.4	25.1
8:00 - 8:30	35.4	16.5
8:31 +	8.0	4.0

- 16.2% in highest peak hour

Quitting Times:	Before Flex-time	After Flex-time
before 4:00 p.m.	3.7%	33.0%
4:00 - 4:29	28.2	31.0
4:30 - 4:59	46.6	26.1
5:00 - 5:30	19.2	6.6
5:31 +	8.5	3.5

- 12.8% in highest peak hour

This diffusion of the peak load could mean a substantial reduction of today's severely overloaded peak hour busses as well as less need to expand freeways. Additionally, there is a 35% increase in fuel efficiency in free flow traffic!

So now the question becomes — after they shift to flex-time, HOW do those employees commute? They carpool and ride the bus in increasing numbers; they leave the car at home more often!

TRAVEL MODE CHANGES:

(Note decrease in driving alone)

Travel Mode:	Before Flex-time	After Flex-time	Change
Drive alone	23.7%	14.1%	- 9.6%
Share a ride (carpool, vanpool)	18.7	23.3	+ 4.6%
Bus	56.3	61.4	+ 5.1%
Walk/Other	1.3	1.3	same

Employees were asked to identify the most important transportation benefits they realized on flex-time. The top two factors for transit users were (1) matching commute times with transit schedules and (2) avoiding the rush hours when they would not be able to get a seat. For carpoolers it was (1) coordinating with other members of a carpool and (2) the ability to share a ride with other household members.

Flex-time is indeed an idea whose time has come. **The escalating price of gasoline motivates more and more commuters to carpool and use transit. Flex-time effectively facilitates the use of these alternative modes of transportation.** Given the opportunity via flex-time, transportation is one area of inflation commuters CAN do something about!



What can this survey tell us about the potential impacts of flex-time on downtown Seattle?

We estimate there are approximately 40,000 employees in downtown Seattle who could shift to flex-time. If only 20,000 of these were allowed to "flex" their hours, the following impacts can be projected:

Assumptions: — 100,000 total downtown employees — 40% presently commute via bus — "Before Flex-time" work schedules used as a base.

1. Impact on Transit Ridership:

40,000 bus riders before flex-time
+ 1,020 new bus riders due to flex-time
41,020 Total bus riders
+ 2.6% in bus ridership

2. Change in Transit Ridership During Rush Hour:

AM	Before Flex-time	After Flex-time	Change
before 7:00 am	1,640	8,573	+ 423%
7:00 - 7:29	7,640	13,742	+ 80%

7:30 - 7:59	15,760	10,296	- 35%
8:00 - 8:30	14,160	6,768	- 52%
8:31 +	800	1,641	+ 105%

- 19.7% in highest peak hour demand (5,882 have shifted away from the peak hour to earlier and later times!)

PM	Before Flex-time	After Flex-time	Change
before 4:00 pm	1,480	13,537	+ 815%
4:00 - 4:29	11,280	12,716	+ 13%
4:30 - 4:59	19,440	10,706	- 45%
5:00 - 5:30	7,680	2,707	- 65%
5:31 +	120	1,436	+1097%

- 14.5% in highest peak hour demand

3. Effect on Existing Downtown Parking:

36,975 long term parking spaces in downtown
- 1,711 cars eliminated (even with new carpools)
35,264 spaces still needed

- 4.6% demand for long term spaces which could be converted to . . .
+ 26% supply of short term spaces

COMMUTER POOL CAN HELP YOU FLEX IT!



For the past two years Commuter Pool has actively promoted and provided technical assistance for the implementation of flexible working hours. To date we have worked with over 100 Seattle area organizations to implement flextime programs. Commuter Pool has recently published a **Flex-time Implementation Manual** — a comprehensive step-by-step implementation guide. If you would like more information about flex-time or a complete copy of the U. of C. study (which includes flex-time's impact on work environment and home life) please write Commuter Pool or call Candace Carlson at (206) 625-4651.

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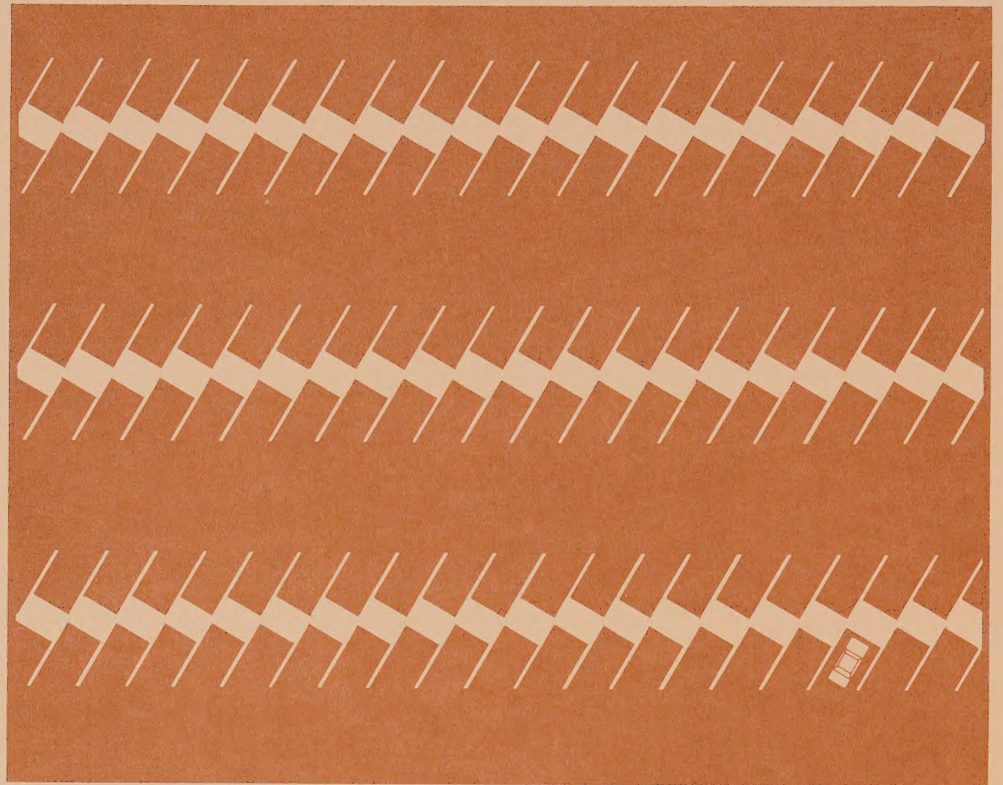
SEATTLE-KING COUNTY COMMUTER POOL

Seattle Department of Engineering
Room 600, Arctic Building
704 Third Avenue
Seattle, Washington 98104

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SPECIAL EDITION



The goal of parking management is to serve as many people, not vehicles, as possible with a given parking supply.

CHAPTER 5

PARKING MANAGEMENT

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SUMMARY AND DEFINITION

Parking is one part of the total transportation system. The availability, accessibility and cost of parking are factors in determining how and when a person makes a trip to work. Parking management is, quite simply: *a solution to a problem*, the problem usually being too many cars and not enough spaces; or *an incentive* in encouraging employees to rideshare or use some other commuting mode, such as bicycles or walking. Parking management involves the allocation of spaces to meet the needs and goals of the company and the adjacent community. The goal of parking management should be to serve as many *people* (not vehicles) as possible with the given parking space supply at a company site. This usually involves "preferential" parking (reserved spaces or close-in spaces) or reduced parking fees for ridesharing vehicles.

Benefits

A company that decreases the parking needs of its employees may be able to use the land for other purposes such as expansion, depending on the local jurisdiction's parking requirements. Other benefits are reduced auto congestion in the immediate vicinity of the site, and improved relations with neighboring residents who may resent employees parking on their streets.

Parking Costs

The dollar costs of parking can be considered from two points of view — the employer's and the employee's. For the employee who chooses to drive to work and does not have free parking provided by the employer, costs can be as high as \$8 a day. The employee who must pay to park is in the minority; a recent study by Shoup and Pickrell indicates that three out of four cars driven to work in the United States are parked in free spaces provided by the employer. If other sources of free parking, such as on-street spaces are considered, 93 percent of all auto commuters park free at work. (For more information on this study, see the Reference list at the end of this chapter.)

Free parking translates into a tax-free subsidy for the employee. As an example, the referenced study calculated that "offering employees free \$50 parking spaces is equivalent to offering an annual \$1,000 bonus to anyone who drives and *nothing extra to anyone who doesn't*." More importantly, the free parking appears to be a significant inducement to drive to work. On the average, "at least 20 percent fewer employees drive to work alone when they pay to park than when the employer provides free parking." Free parking is obviously a strong deterrent to ridesharing that the coordinator must work against.

The cost to *provide* parking has become so significant in urbanized areas that many employers find it cost effective to develop an alternative transportation system instead of building new garages or lots. For instance, in Santa Clara County an acre of land — 135 parking spaces — in industrialized areas may cost over \$300,000. With construction costs of at least \$4 per square foot, the total land and construction costs *per stall* represents an employer investment of over \$3,500. That is \$3,500 for land that simply stores a vehicle for 40 hours per week, returns no income and is vacant 75 percent of the time. Such space not only could be used for other purposes, but the capital could be applied to income-producing investments. The cost of building a parking structure rather than a lot is even more prohibitive.

SUCCESS STORIES

Bank of America, San Francisco

The Bank of America in San Francisco has 190 parking spaces in its Data Processing Center at Market and Van Ness, and another 850 spaces in an off-premise parking structure (with a shuttle van to the data center every 15 minutes during peak periods). The company has a policy of encouraging ridesharing, and as an incentive provides free parking in these facilities for vehicles with four or more Bank of America employees (employees from other companies may also be in the car/vanpool).

Program Details:

- A carpool of four or more persons parks free.
- There are reduced monthly rates of \$10 for three persons and \$20 for two persons in the Data Center garage. The regular rate is \$30.
- In the off-premise facility, three persons pay \$6.50, two persons \$13.25. The regular monthly rate is \$20.
- Application is through the employee's departmental supervisor, since each department is allocated a certain number of carpool spaces (see the Appendix for a sample application form).
- A vehicle identification card is issued to each group and placed on the dashboard of the vehicle being used.
- Carpool groups must update their application quarterly.
- There is no on-site enforcement. However, since each department must pay the subsidy for carpool spaces used by its personnel, there is strong incentive for the supervisor to watch for abuses.
- Marketing is done through posters placed on employee bulletin boards and through notices in company newsletters.
- The bank estimates that 200 carpool groups use the off-premises facility; 80 use the Data Center garage.

The University of California, San Francisco

The University medical center, located in a densely populated residential area, already had a parking shortage when the city instituted stricter on-street parking regulations on adjacent neighborhood streets ("preferential sticker parking," described later in this chapter). As part of a comprehensive transportation plan, UC instituted reduced parking rates and preferential spaces for carpools of three or more, with priority on the parking space waiting list going to carpool groups. The reduced rate has since been dropped, with no subsequent decrease in the number of carpools. Carpools still receive close-in parking. Of 2,000 spaces available for staff, patients and visitors, 200 are used by carpool groups (this represents 10 percent of all UCSF employees).

Program Details:

- Each carpool group receives a special garage pass, which is placed on the dashboard of the vehicle being used and allows use of preferential spaces. Vanpools receive free preferential parking.
- Carpools must have at least three riders upon entering the garage to get close-in parking. In addition, the campus security patrol regularly checks the garage to see that only legitimate carpools with passes are using the close-in parking.
- A Transportation Task Force handles policy matters; a Carpool Subcommittee reviews and approves carpool parking decal applications; the Garage Manager

enforces the regulations. The Carpool Subcommittee is composed of both carpoolers and campus administrators.

- Payroll deductions are utilized for monthly payments.
- Although free parking is provided for doctors who donate their services to the hospital clinics, no exceptions for parking are made for regular staff physicians. A certain number of regular parking decals are reserved for top management.

Children's Hospital, San Francisco

Children's Hospital in San Francisco, which has a much smaller facility than UCSF but similar problems, recently instituted its own transportation program. The coordinator drafted and had adopted by hospital management a parking policy which guides and supports his work program.

Program Details:

- All parking facility users must apply for a garage registration card (similar to a charge card). Carpools and vanpools have priority for available registration cards. The hospital's policy is to bump single-occupant pre-paid monthly parkers if necessary to provide a guaranteed space to a new carpool group.
- Monthly parking is \$35; a three-person carpool or vanpool parks free; a two-person carpool pays \$30.
- A new carpool or vanpool group fills out a registration form and receives a brief orientation from the transportation broker on the hospital's parking and enforcement policies. Groups re-register every six months.
- Each carpool or vanpool group receives *one* garage registration card which is verified by the garage attendant upon exit, and a bumper decal for each car used by the group. Carpool and vanpool vehicles must park in authorized parking levels only.
- Enforcement is on a random basis by the security guard; the guard reports alleged violations to the transportation broker, who talks with the group; only three cards have had to be recalled in the past year.
- Space will be allocated to joint Children's Hospital Marshal Hale Hospital carpools or vanpools (there must be at least two Children's employees).
- Children's worked with the city to obtain an ordinance, implemented in May 1982, permitting all-day parking for carpools *on-street*. Seven new carpools and one vanpool now park on the street near the hospitals.

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PARKING MANAGEMENT — HOW TO DO IT

You may want to consider parking management if: parking demand exceeds supply and expansion is not possible; parking demand exceeds supply and expansion is possible but the employer wants to reduce costs; or parking supply equals or exceeds demand but the employer wishes to encourage ridesharing.

INVENTORYING EXISTING PARKING SUPPLY AND UTILIZATION

A coordinator needs to evaluate existing parking supply and utilization before developing a strategy. This basically involves conducting an inventory of spaces to determine:

- number of parking facilities and spaces in each facility;
- type of space (short-term, long-term, truck loading, handicapped, carpool, visitors, etc.);
- occupancy (how long is each space occupied by a vehicle — generally measured by observation at start of working day, mid-morning, mid-afternoon or at shift changes);
- revenue generated from parking fees and current use of this revenue;
- any other special considerations (metered spaces on the street used by clients, public parking available to employees or visitors, plans for expansion, etc.).

The coordinator should also determine how many people are currently employed, shift times, number of employees per shift, and the estimated number of other users of the parking spaces (clients, visitors, etc.). It should be noted that this data is necessary for program evaluation and monitoring.

INSTITUTING PARKING MANAGEMENT

Develop a Basic Strategy

The variables in determining the best parking management plan for your company are:

- Is parking free or do employees pay?
- Is there a greater demand for parking spaces than the supply?
- Does your company want to encourage ridesharing?

If employees pay to park their cars, they already have an incentive to rideshare. You can offer free or reduced price carpool and vanpool spaces to further increase ridesharing. There should be as significant a difference as possible between the rates charged for ridesharers and the rates for commuters driving alone. As indicated previously, charging for parking *does* affect the commuter's decision to drive alone, and the higher the fee (within reason), the more the incentive to rideshare or take transit.

Most companies or institutions charging for parking use a graduated rate: three or more persons park free (or 10-25 percent of regular rate), while two persons are charged 75 percent of the regular rate. If your *regular* rate is low (\$1-\$2 per day), it will probably be necessary to consider raising this rate in order to make a significant difference.

If there is a shortage of parking spaces, employees may already be pooling. If there is a waiting list for parking spaces, the coordinator should give priority to carpools and vanpools. In other words, the coordinator will want to capitalize on already existing incentives.

If parking is free and/or there are plenty of parking spaces available but the company wants to encourage ridesharing, there are several options. Carpools and vanpools can be given spaces in desirable locations near offices. Carpools and vanpools can also be allowed to drive through the facilities (where regular traffic is not allowed) to drop pool members near their offices.

If the company is strongly committed to ridesharing or wants to avoid building new spaces when the number of employees increases, employees can be charged for parking. Carpools and vanpools should pay a reduced fee or no fee at all. It can be expected that problems will occur with instituting a fee for parking when none existed in the past, or a fee hike. Emphasis should be placed on determining a fee that will be an incentive to shifting to commute alternatives. A fee of 50 cents to \$1 a day would probably be too low to produce a significant change, while \$10 a day would create an uproar. The parking policy should indicate how the fees collected will be used. The company may want to consider using the fees to fund part of the ridesharing program.

Establish Preferential Parking Spaces

Determine the number of spaces that might be needed for ridesharing vehicles. It is difficult to predict precisely how many car/vanpools might be formed, but a goal of 10-25 percent of employees in carpools at the end of one year is reasonable. Assuming three persons per carpool and a work force of 500 during one shift, a one-year goal would be 50 to 125 persons carpooling, with a space requirement of 17 to 45 stalls.

At this point you have a choice of either setting the spaces aside exclusively for carpool/vanpool use even if the spaces must remain vacant until the groups are formed, or assigning spaces as each carpool is formed. The "set-aside" approach is very visible and preferable as an incentive, but may be perceived by management as wasteful if the spaces sit empty for very long.

Estimate Revenue Gains or Losses

If a fee is now charged for parking, determine a reasonable cost differential for reduced rate parking and estimate the effect on parking revenues. If a fee is being instituted, estimate the revenue that will be generated and prepare a proposal for its use.

Plan for Program Administration

Design an administrative/enforcement structure and identify the necessary time requirements. The simplest structure is to identify stalls in some manner as reserved carpool/vanpool stalls and have groups fill out registration forms, with an honor system or spot-check enforcement procedure. The complexity of the program and amount of time and money invested should be in proportion to the severity of the parking problem, the size of the company and the staff available to carry out the program.

If a fee is involved, design a program for collecting fees and validating payment.

Obtain Management Support

Present a policy of reserved or reduced rate parking spaces for car/vanpools to company management. This should be accompanied by your projected demand and a realistic one-year goal. Obtain management approval.

Market the Program

Marketing the parking management program should preferably be done in conjunction with ridesharing marketing. The emphasis should be on the provision of the spaces or fee reduction as an incentive and encouragement to rideshare, and attractive features (i.e., a space right next to the front door, covered parking, etc.) should be highlighted.

Do's and Don't's

- Do provide carpool and vanpool parking as close to the work place as possible.
- Do mark the carpool and vanpool spaces very visibly to remind everyone of the ridesharing incentives being provided by your company.
- Do make fee differentials significant enough to be effective.
- Don't make registration or enforcement onerous or complicated.
- Don't overestimate the number of spaces required if you decide to set aside spaces before demand is established.
- Don't fragment responsibility for program implementation; try to have all administrative functions assigned to one person, preferably the same person (or department) who is managing the ridesharing program.

Problems and Solutions

- Union contracts providing for free or guaranteed parking:
These need to be amended during contract negotiations to include "fringe benefits" of reserved or reduced rate car/vanpool parking. As long as *all* personnel are eligible to attempt ridesharing, there should be no problem with equity. Discussions should be held with union representatives *if* transportation allowances or parking privileges are currently a part of a union contract and management contemplates a change.
- An employee who drives alone must be "bumped" from his/her space to provide a carpool space:
The rule should be "last in — first out" (last person to have received a space is the first to be bumped). Obviously, a major effort should be made to move that person into a carpool or transit.
- Management says, "We'll provide spaces if we get some carpools":
Remind them of their commitment to ridesharing and the need for incentives; a commitment to reserved carpool/vanpool spaces is necessary if employees are to be convinced that management really supports ridesharing.

Follow-up Program

A follow-up program should include a periodic check to determine need for more spaces, continual advertising, evaluation of effectiveness, enforcement if necessary, etc. Include monitoring of revenues if a fee is involved.

PUBLIC PARKING MANAGEMENT STRATEGIES

There are a number of parking management strategies employed by the public sector with which coordinators should be familiar. Implementation of such strategies may place the coordinator in the position of having to institute or strengthen his/her company's own parking or ridesharing programs. Or, the coordinator might want to advertise some of the programs (such as Caltrans' vanpool parking) as part of the company's ridesharing effort.

Preferential Sticker Parking

In San Francisco neighborhoods overloaded with commuter or institutional parking (hospitals or educational facilities), the city supplies bumper decals for cars registered to residents in the designated neighborhood. Cars with the decal can park any length of time on the street; those vehicles without decals are limited (usually to two to three hours) in the amount of time they can park during certain hours. There are a number of variations of this strategy; the impact on the companies or institutions in the area is a reduction in available on-street, all-day parking for employees.

Differential Parking Rates

Local governments may choose to structure parking rates in public garages or lots to achieve certain goals, usually limiting or eliminating all-day commuter parking. Generally the rates will be low for the first one to four hours, and then increase significantly. Again, the impact of such a rate scale will be to decrease the supply of reasonably priced employee parking spaces.

Taxation

Another method a local government may use to change parking/driving habits is to tax paid parking spaces. San Francisco now charges a 15 percent tax each time a space in a public or private parking lot is used.

Carpool/Vanpool Parking Lots or Spaces

As an incentive to ridesharing, a local or state government may provide reduced-rate or reserved parking for carpool/vanpool vehicles. For instance, Caltrans sponsors subsidized vanpool parking through private vendors in San Francisco. There are currently approximately 14 lots on Caltrans property in San Francisco. A vanpool of eight or more people may register with a lot operator and park for \$10 a month. Caltrans will credit the difference between the regular monthly parking fee (usually \$60-\$70) and the reduced rate to the vendor's lot rental bill. Approximately 300 vanpools are using the lots. Caltrans also provides park-and-ride lots for carpools, vanpoolers and transit users throughout the Bay Area. Contact Caltrans for specific information and application procedures for either of the two programs. (The number is listed in the Contacts list at the end of this chapter.)

In coordination with RIDES, BART reserves close-in preferential parking at nine stations for registered carpools and vanpools. An application for the BART Pool program can be obtained by calling BART. The city of San Francisco has started to reserve a certain number of spaces in some of its garages for vanpool parking. Although no preferential rates are given, space is guaranteed. Other cities may be encouraged to consider guaranteed space or reduced rates for carpools and vanpools in city parking lots.

Ridesharing Use of On-Street Metered/Reserved Spaces

Some cities, such as Knoxville and Portland, have programs that allow carpoolers to utilize on-street parking by paying a small fee for a dashboard permit. Such a permit allows the vehicle to remain parked all day in a space normally reserved for one- or two-hour parking.

WORKING WITH PUBLIC OFFICIALS TO START PARKING MANAGEMENT PROGRAMS

An alternative to simply responding to governmental programs is to work with officials to start parking management strategies that will help the company achieve its ridesharing goals. For instance, Children's Hospital has worked with the city of San Francisco to institute on-street carpool parking for hospital employees. Your company might want to investigate new public ridesharing lots, preferential vanpool parking in public garages, reduced automobile parking space requirements for businesses and corporations or bicycle parking ordinances. As an example, 3M worked with the city of St. Paul to change the number of required parking spaces for a new office development, and to use the available parking supply to encourage ridesharing. Groups of employers working together might lobby cities to implement zoning and parking programs which are supportive of ridesharing.

REFERENCES

- *Cost Effectiveness Analysis of TVA Employee Transportation Incentive Program*, by the Federal Energy Administration, Office of Conservation, May, 1977 (available from U.S. Department of Energy, Office of Conservation, Report FEA/D-77/297, Washington, D.C., or from the Ridesharing Office, U.S. Dept. of Transportation, Room 4432, 400 7th St., S.W., Washington, D.C. 20590).
- *Free Parking as a Transportation Problem*, 1979 (prepared for the U.S. Department of Transportation by Donald C. Shoup and Don H. Pickrell; available from the Ridesharing Office, same mailing address as above).

CONTACTS

Company Programs

- Bank of America, Corporate Headquarters, San Francisco
Lois McClain, Transportation Coordinator
180 Montgomery St., 25th Floor
San Francisco, CA 94108
(415) 622-6248
- Children's Hospital, San Francisco
Cliff Chambers, Transportation Broker
3700 California St.
San Francisco, CA 94118
(415) 864-7552 ext. 246
- University of California, San Francisco
Jim Wood, Transportation Manager or
Lee Clark, Transportation Broker
Joe Brenner, Transportation Assistant
Transportation Services
11 Irving Street., Room A-C14
San Francisco, CA 94143
(415) 666-1511

Information on and Applications for Public Park-and-Ride Lots for Carpools, Vanpools or Transit Users:

- Caltrans, District 04 Headquarters, San Francisco
Merle Johnson
(415) 557-8594
- Golden Gate Ridesharing Division
Dee Lukshin
(415) 921-5858

- RIDES for Bay Area Commuters, Inc.
 (415) 861-POOL San Francisco
 (408) 996-POOL Santa Clara
 (415) 644-POOL Alameda

Information on Vanpool Preferential Parking:

- Caltrans, District 04 Headquarters, San Francisco
 Jim Moon
 (415) 557-1454

BART Pool Program

- Applications and information:
 (415) 465-4100, ext. 805
- Administration:
 Jim Evans
 (415) 465-4100

APPENDIX

- UCSF Hospital Carpool Parking Application Form
- Bank of America Carpool Application Form
- Value of Employee Parking — Santa Clara County
- Santa Clara County Parking Stall Costs

SUPPLEMENTAL APPLICATION
FOR CARPOOLERS

A CARPOOL consists of three or more persons who have applied for and received a carpool permit and who regularly enter the garage in a single vehicle containing three or more persons. (Existing two person pools, and approved pools utilizing two passenger vehicles, are deemed to be in compliance with this definition.)

- 1) Name _____
- 2) Supervisor's name _____ Phone _____
Campus address _____
- 3) Usual work schedule: Mon-Fri _____ Other (specify) _____
8am-5pm _____ Other (specify) _____
- 4) Are you interested in additional riders? _____ Yes _____ No
- 5) Other pool members: a) _____ b) _____
c) _____ d) _____
- 6) Which pool member should be contacted for questions?
Name _____ Campus phone _____

Payroll deductions are mandatory for all participants, except registered UCSF students. If you do not have a current payroll deduction in effect, complete the enclosed form and return it with this application.

I agree to maintain a carpool in accordance with the above definition and I understand that my pool permit may be revoked for failure to comply with the definition. I also understand that my responses to the above questions may be subject to verification.

Signed _____

POOL PERMITS MUST BE DISPLAYED ON THE LEFT CORNER OF THE DASHBOARD.

Bank of America
PARKING SUBSIDY APPLICATION
PARKING LOT/FACILITY

Parking Permit No. _____

This is No Carbon Required paper.

Effective Date _____
(Office Use Only)

Group Leader or Individual Driver:
Print Name _____
Last First Initial I.D. BADGE NO. Date

Signature _____ Business Phone _____ LICENSE PLATE NO. _____

Home Address (Number, Street and City) _____ Zip Code _____

Work Location _____ Department/Office Name & NUMBER _____ TYPE _____ AMOUNT _____

IMPORTANT:
THE UNDERSIGNED EACH ASSUME ALL RESPONSIBILITY FOR CONTACTING, INVESTIGATING AND DRIVING OR COMMUTING WITH THE OTHER PERSONS WHOSE NAMES OR SIGNATURES APPEAR BELOW. UNDERSIGNED EACH ALSO AGREE THAT BANK OF AMERICA NT&SA WILL NOT BE LIABLE FOR ANY ACTION TAKEN OR OMITTED IN GOOD FAITH BY BANK OF AMERICA NT&SA, ITS AGENTS OR EMPLOYEES IN CONNECTION WITH THIS CAR POOL.

CAR POOL MEMBERS:	Name (Print)	Signature	Home Address	DEPT. #	EXT.
1.					
2.					
3.					
4.					
5.					

Group Leader
Signature _____

I CERTIFY THAT THE INFORMATION CONTAINED IN MY PARKING SUBSIDY APPLICATION IS VALID
AS OF THE DATE BELOW.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

VALUE TO EMPLOYEE OF A "FREE PARKING"

STALL PROVIDED BY EMPLOYER *

SANTA CLARA COUNTY

1980

"FREE PARKING" - A SUBSIDY ???

COST TO EMPLOYER

\$ 600 PER YEAR

\$ 50 PER MONTH

VALUE TO EMPLOYEE

TAX BRACKET

ANNUAL VALUE **

25%

\$ 800

33%

\$ 900

40%

\$ 1,000

50%

\$ 1,200

* SEE PREVIOUS CHART

**TAX FREE

HCK 5-28-80

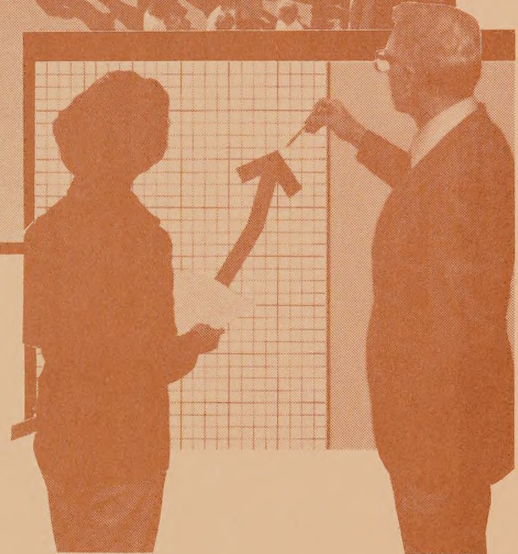
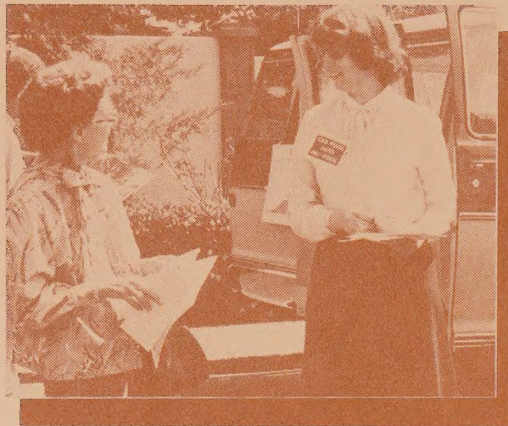
ANALYSIS OF ANNUAL COST FOR ONE
PARKING STALL-SANTA CLARA COUNTY

1980

"FREE PARKING" !!!

-	1 ACRE = 44,000 SQUARE FOOT	
-	1 ACRE COST \$ 300,000	
-	1 STALL = 325 SQUARE FOOT	
-	44,000 DIVIDED BY 325 = 135 STALLS PER ACRE	
-	\$ 300,000. DIVIDED BY 135 = \$ 2,222 PER STALL	
-	CONSTRUCTION COST PER FOOT \$ 4	
-	325 X \$ 4. = \$ 1,300 PER STALL	
-	COST OF LAND	\$ 2,222
-	COST OF CONSTRUCTION	<u>\$ 1,300</u>
	INVESTMENT	\$ 3,522
-	\$ 3,522 X 15% INTEREST	\$ 528
	TAXES	\$ 35
	MAINTENANCE	<u>\$ 12</u>
	TOTAL ANNUAL COST	\$ 575

HCK 5-28-80



The central ingredient for a successful commute alternatives program is strong administration through a Transportation Coordinator.

CHAPTER 6

ADMINISTRATION

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SUMMARY AND DEFINITION

An important ingredient for a successful commute alternatives program is a transportation coordinator. The coordinator is responsible for developing the program, gaining management support and marketing the program to fellow employees, as well as maintaining, evaluating and improving the program.

Each of the alternative transportation measures discussed in this manual — ridesharing programs, encouraging transit use, cycling and walking, parking management, and adopting alternative work hours — may be implemented individually. But the most successful approach is to develop an overall, well-coordinated program including most, if not all, of these strategies.

A company may choose to hire a consultant to assess the situation and develop an overall transportation program and then assign a coordinator to implement the program. This manual, however, is designed to provide enough information for a transportation coordinator to develop an appropriate commute alternatives program for his/her company.

This chapter will assist the coordinator in using the preceding information to put together a commute program. It also includes a section on marketing the program and one on ongoing program maintenance and evaluation activities.

SUCCESS STORIES

All of the companies and institutions mentioned in this training manual have adopted multifaceted programs which are well-managed. The University of California, San Francisco, has a three-person, full-time transportation program staff, plus clerical support. The Lawrence Livermore National Laboratory has a full-time, two-person staff. ROLM Corporation in Santa Clara hired a transportation program manager to develop a comprehensive commute program proposal and get the program started. The program is now maintained by a full-time commute coordinator.

There are innovative ways to provide proper administration. Because Children's Hospital and Marshal Hale Hospital, in San Francisco, are adjacent to each other, they can share the salary and program costs of a full-time transportation coordinator. Hewlett-Packard, in Palo Alto, has a full-time transportation coordinator running their program plus part-time coordinators at each of the company's nine facilities in the area. The part-time coordinators make initial contact with employees, promote the program and provide simple assistance. Many smaller facilities have part-time coordinators who usually devote 50 percent of their time to the program. Their other duties are generally closely allied to the program in such areas as personnel, parking or public safety functions, or public relations.

Successful coordinators find several ways to continuously market their program to employees. One program that uses a great variety of marketing tools is the University of California in San Francisco. Their Transportation Office provides such informational handouts as a letter from the Chancellor explaining the transportation and parking situations at the University, a transit guide and ridesharing applications. Promotion activities include annual Transportation Days, poster contests with transportation-oriented prizes, and new-employee orientation sessions. Incentives include preferred parking rates and priority for ridesharing vehicles, shuttle bus services,

sale of transit passes, parking facilities for bicycles and motorcycles, and regular news releases to the campus community as well as to area newspapers and TV stations.

Lawrence Livermore National Laboratory, in Livermore, also has an extensive marketing and incentives program. It includes a Transportation Service Guide; transit maps and schedules; buspool and carpool newsletters; bicycle repair; preferential parking for ridesharing vehicles; taxis and bicycles available for shuttle within the facility during the day; information kiosks; sale of transit commute tickets; and even rechargers for electric cars.

General Electric, in San Jose, has adopted a Conscientious Commuter Program with weekly cash prizes to participants. Hewlett-Packard has received excellent employee attention and results from Transportation Day promotions. A downtown San Francisco employer uses a "buddy system" to get new employees onto transit: at new employee orientations, each person is paired with a present employee in his area who will help the new person get started in an alternative commute mode. Only four of the 175 employees of the firm drive alone to work.

PROGRAM DEVELOPMENT

There are several steps involved in starting a commute alternatives program: (1) establish a broad company policy; (2) gather information; (3) develop a program; (4) gain management support; and (5) set up the mechanics of administering the program. The amount of effort involved and the timing of each step will vary with the size and complexity of the company, the background and role of the transportation coordinator, and the degree of company commitment to the program.

ESTABLISHING A BROAD COMPANY POLICY

Clarify Company Goals and Objectives

It is important to understand why your company chose to get involved in transportation. Clarify management goals, objectives and expectations for your project. Is your management interested in eliminating the need for a specific number of parking spaces; or is it more concerned with presenting a positive image to the community? Company motivation will influence the way you develop your program and the way you present proposals to management.

Propose a Policy Statement for Adoption

Your company may already have a transportation policy and a budget for the commute alternatives program or you may be developing one to propose to management. The policy should consider the reasons behind the company's concern with transportation, and the program goals. It should be a broad statement of support for your program and should be adopted early in your project and announced to all employees. An example of a company transportation policy (from ROLM Corporation) is included in the Appendix.

GATHERING INFORMATION

Orient Yourself to the Job

A new transportation coordinator needs to orient him/herself to the job. This means finding out about the degree of access to top management, company decision-making processes and program approval procedures, existing company transportation policies, and the financial and staffing resources available. Determine with which departments you will need to interact (e.g., public information, security, marketing, data processing), and get to know the people who will work with you. You should also investigate the existing employee newsletter, bulletin boards, new employee information packages, staff orientation meetings and other means of communication. Find out about company expansion plans. In the course of developing the program, you will probably also need to become familiar with the company's graphics, printing and computer facilities.

Familiarize Yourself With the Transportation System

This manual is supplemented by a list of people to contact for more information. Telephone or meet with the transit representatives in your area and become familiar with the transit routes serving the employment site, fares and schedules. Ask for information on plans for future transit improvements in the area. Visit RIDES, and/or the local ridesharing agencies for more information on their services. Gather data on parking spaces, fees and policies, as well as on the general levels of traffic congestion on or near the site. Investigate the convenience of pedestrian access on the site, especially from the nearby bus stops, and find out whether bicycle lanes, paths or parking facilities exist in the area or are being planned.

Gather Data on Employee Locations

Information on where employees live should be immediately available from the personnel department. It is helpful to map this information (the map should be accessible to employees). Zip codes usually cover too large an area for mapping residence location; it is recommended that you use an area map with a grid system overlay and indicate the number of employees residing in each grid. The Appendix at the end of this chapter includes a paper on the use and availability of maps. Information on employee location will give you a basic idea of which strategies will be most successful in your company.

Survey Employee Travel Habits

To find out how employees currently get to work, you will need to do a survey. Model surveys that can be adapted to your specific needs are included in the Appendix. It is best to use a simple survey which can be repeated at intervals (probably yearly) to evaluate the success of the program. The survey will provide information on employees' present commute habits, home locations, work schedules and interests in alternative ways to commute. The survey should not request confidential information such as exact addresses or home telephone numbers.

The survey should be distributed to employees with a cover letter preferably signed by the company's chief executive officer asking for cooperation. A simple way to distribute the survey is with payroll checks. It is important to find a way to encourage all employees to complete the survey, not just those who are thinking about changing their commute patterns. If your company is of manageable size, it may be possible to telephone those who do not complete the survey.

An easy, inexpensive way to accomplish a basic survey of travel habits is to begin your program with a RIDES campaign and use the information from the RIDES application forms (see the Appendix of the Ridesharing Chapter). Again, it is necessary to assist RIDES to get as many employees as possible to complete the survey. RIDES will process the survey and provide a printout of the information.

Analysis of the survey data may be done by hand or by computer, depending upon the number of returns and complexity of the data. The survey analysis should accomplish the following three things:

- Look at the information on employees' trip distances, residential clusters and proximity to transit; this should help you determine which alternatives will work best in your company.
- Develop a baseline profile of employee commute patterns before your program starts. Use this for comparison with the results of future surveys to evaluate the program's effectiveness.

- Use the survey information on employee interests and attitudes to determine the content of your marketing campaign. The first time a survey is done, you may wish to add more market analysis questions, or you may later wish to do more specific marketing surveys. The use of surveys as a marketing tool is discussed in the Marketing section of this chapter.

DEVELOPING A PROGRAM

Determine Appropriate Alternatives

The information that has been gathered on the available resources and on employee trip characteristics should be used to select the appropriate commute alternative strategies for the company. Factors to consider include: the size of the company work force; work shifts and schedules; distance from home to work; residential clustering; proximity to other major employers; convenience of transit connections and traffic and parking problems in the surrounding neighborhood. The suitability of each of the commute alternative strategies to various situations has been discussed in the previous chapters and is shown on Table 19.

Table 20 shows how Roberta Gray, of ROLM Corporation in Santa Clara, analyzed the market characteristics and determined what alternatives are feasible at ROLM. The main factor used to determine which commute options are appropriate is the distance to work. Target zip codes (those containing large numbers of employees) were selected within each distance range. The coordinator markets the appropriate alternatives more actively to employees who live in those zip codes.

Evaluate the Impact of Available Incentives

Recent state legislation (SB 321) provides several tax incentives for employers who set up ridesharing and other commute alternatives programs. SB 320 provides tax deductions to employees who rideshare. Several other bills (AB 548, AB 549 and AB 550) clarified legal provisions affecting taxation of monetary compensation for ridesharing, workmen's compensation coverage, PUC regulation of ridesharing vehicles, and registration of ridesharing vehicles.

Details of the tax incentives and other legislation are included in Tables 21 and 22.

The coordinator should evaluate the potential benefit to the company of taking advantage of these incentives as part of the program proposal. A sample "Pro-Forma Calculation of Tax Benefits" for a vanpool program is included in the Appendix of the Ridesharing Chapter.

The form which must be completed for an employer to receive tax benefits is included in the Appendix of this chapter. Additional copies may be obtained from the State Franchise Tax Board (listed in the Contacts section). Completing these forms may be part of the coordinator's responsibility.

Investigate Options

After selecting the appropriate alternatives, it is necessary to investigate the several ways of approaching each alternative. If carpooling is a viable mode, will you use RIDES' services, set up an internal matching program, or use a combination? Will the company sponsor its own vanpools, encourage owner-operated vanpools, or assist in the formation of groups for RIDES vans? What ridesharing or transit incentives will the company offer? What bicycle facilities are feasible? How much work schedule flexibility is possible within the company?

TABLE 19
MARKET CHARACTERISTICS AND APPROPRIATE COMMUTE
ALTERNATIVE STRATEGIES

Market Characteristics	Carpool	Vanpool	Buspool	Bike	Walk	Transit	Shuttle To Transit
500 or fewer employees							
• Majority on same shift, or	X			X	X	X	X
• Multiple shifts				X	X	X	X
• Isolated location, or	X			X	X	X	X
• Nearby employers	X	X	X	X	X	X	X
• Majority of work force living within 10 miles, or	X			X	X	X	X
• Significant numbers of work force living farther than 10 miles	X	X	X			X	X
500-2,001 employees							
• Majority on same shift, or	X	X	X	X	X	X	X
• Multiple shifts	X	POSSIBLE		X	X	X	X
• Isolated location, or	X	POSSIBLE		X	X	X	X
• Nearby employers	X	X	X	X	X	X	X
• 50 percent living within 10 miles, or	X			X	X	X	X
• Significant numbers living further than 10 miles	X	X	X			X	X
• Multiple plant sites	X	POSSIBLE		X	X	X	X*
2,001 employees or more							
• Majority on same shift, or	X	X	X	X	X	X	X
• Multiple shifts	X	X	X	X	X	X	X
• Isolated location, or	X	X	X	X	X	X	X
• Nearby employers	X	X	X	X	X	X	X
• 50 percent living within 10 miles, or	X			X	X	X	X
• Significant numbers living further than 10 miles	X	X	X			X	X
• Multiple plant sites	X	POSSIBLE		X	X	X	X*

*consider shuttle between sites

TABLE 20
ANALYSIS OF DISTANCES FROM EMPLOYEE
RESIDENCES TO ROLM

Distance to Work	Number of Employees	Percentage of Employees	Viable Alternative Transportation Options	TARGET AREAS — FIRST PHASE		
				Areas	Number of Employees	Percentage of Employees
0-1 miles	0	0	Walk Bike Motorcycle Moped Bus			
1-6 miles	875	37	Walk (1-2 mi.) Bike Moped Motorcycle Bus Carpool	Zip Codes 95050, 95051 (Bus Campaign)	429	18
6-10 miles	771	32	Bike Moped Motorcycle Bus Carpool	Zip Codes 95117, 95008, 95130, 95070, 95030, 94043, 95035, (Bus Campaign)	299	13
10-15 miles	484	21	Moped Motorcycle Bus Carpool Vanpool	Zip Codes 95127, 95122, 95148, 95135, 95121, 95111, 95136, 95118, 95120, 95123 (carpool, paratransit van, vanpool campaign)	364	15
15-30 miles	101	4	Carpool Vanpool Train/Bus combination	Peninsula, Redwood City to South San Francisco (Train/Bus Campaign)	54	2.3
30+ miles	144	6	Carpool Vanpool	San Francisco (Vanpool Campaign)	53	2.3
TOTAL	2,375	100				50.5

*Distances are "as the crow flies;" add 10-20 percent to allow for normal travel patterns.

Adapted from a table developed by and reprinted with the permission of ROLM Corporation.

TABLE 21

EMPLOYER COMMUTE ALTERNATIVES TAX INCENTIVES (SB 321)

Tax Credit for Vehicle Costs

Employers may claim as credit toward their California state income taxes 20 percent of the nonoperating costs of commuter buses or vans, shuttle buses or motorpool vehicles which are part of a ridesharing program. These vehicles must meet the following requirements:

- be acquired after September 25, 1981
- be made available on a nondiscriminating basis
- would not otherwise be necessary for business activities
- 50 percent of the vehicle's use (80 percent for shuttle buses) must be for the transport of employees to and from work

Nonoperating costs are purchase or lease costs (excluding maintenance, fuel, driver's salary or other operating expenses).

Ridesharing Reimbursement Deductions

The following subsidies or reimbursements are allowed as deductions on California taxes as ordinary and necessary business deductions:

- subsidies to employees for vanpooling, carpooling or buspooling
- monthly transit subsidies or subscriptions to taxipools
- cash equivalents of parking costs given to employees who do not require parking
- providing free or preferential parking for carpools or vanpools

Facility Improvement Depreciation

Costs for constructing or installing facilities that promote ridesharing may be depreciated by employers over a 36-month period.

Facilities may include, but are not limited to:

- preferential parking spaces for vanpools or carpools
- showers, locker rooms and bicycle racks for bicyclists
- bus shelters

Additional Employer Incentives Information

- Tax credits not used in the year they are earned may be carried over to the next taxable year.
- Businesses who join forces to create ridesharing programs are eligible for tax benefits.
- These new California tax incentives are in addition to the benefit employers receive from the Federal Energy Tax Act of 1978 which allows credit for 10 percent of the vanpool vehicle purchase or lease costs on federal income taxes.
- SB 321 became effective for income years beginning on January 1, 1982. The provisions of the bill will remain in effect until January 1, 1987, unless amended by law. This termination date does not affect the carry-over of unused credits.

TABLE 22

OTHER CALIFORNIA COMMUTE ALTERNATIVES LEGISLATION

- **SB 320** provides a \$7/month state income tax deduction for ridesharers and public transit users.
- **AB 548** makes any monetary compensation for ridesharing nontaxable. It also prevents a city, county, state or other political jurisdiction from imposing taxes or licenses on a ridesharing activity when it is incidental to another activity (commuting to work).
- **AB 549** excludes the home-to-work commute from the work day.
- **AB 550** exempts ridesharing vehicles with a seating capacity of 15 or less from regulation by local government or the PUC. Defines ridesharing vehicles as passenger vehicles for registration and other vehicle-code purposes.

The previous chapters of this manual summarize the basic options for each program. More information is available from the contact people. The coordinator should investigate the costs and benefits of each option in the context of the company's situation, problems and degree of commitment to the program.

Set Realistic Goals

At any given time, only a few people are willing to consider changing their habits; the average response to a ridesharing campaign is 5 percent. New employees or those that are moving are more likely to consider transportation alternatives since they will have to change their travel habits to get to the new job. Successful programs usually take several years to achieve maximum results.

Factors to consider in setting program goals include: the potential market for each alternative (number of employees currently driving alone who could switch); traffic congestion, parking availability and expense, and the cost of gas; proximity to and cooperation with other large employers; rate of employee turnover; and degree of company commitment. Determine a long-term goal for maximum program success and a goal for the first-year program activities. Goals should be time-specific and quantified and the goal statement should include appropriate evaluation measures.

Develop a Marketing Plan

When you have determined what alternatives and options you wish to promote, you need to decide how you will promote them. Marketing is discussed in the next section; a general marketing plan should be part of your program proposal.

Develop Your Work Program

You should annually develop a work program, detailing immediate goals and scheduling your activities. One of your first efforts on the job will be the development of your overall commute alternatives program proposal. Your work program will set deadlines for completing the various parts of the proposal. Typical first activities which might begin concurrently with the program development task are participation in a RIDES campaign, development of a transit map, and the design of a new-employee information package. Examples of a transportation coordinator's work program are included in the Appendix.

GAINING MANAGEMENT SUPPORT

Address Management Concerns

When the program development is completed or at various stages during development of the program, you will need to present your proposal to management for approval. The program should be presented as clearly and precisely as possible, with emphasis on company costs and benefits.

You should be familiar with the particular concerns of your company that the program addresses. For example:

- Does the company have a poor image in the community?
- Is the company expanding?
- Are there government restrictions on growth in the area?
- Does the company have trouble recruiting personnel?
- Is management concerned about staff morale or productivity?

- Is the company concerned about absenteeism or tardiness during gas shortages?

Your program presentations should aim at convincing management that your commute alternatives program is a cost-effective means for solving these problems.

Present a Complete Program Proposal

Your proposal should be for an overall company commute alternatives program. It should include: specific company policies to support the transportation program; details on how the company can take advantage of government-offered incentives; a long-term plan for introducing the appropriate commute alternatives into the company, with details on the benefits and problems associated with the recommended options and incentives; long-range and immediate program goals; a proposed plan for marketing the program to employees; the transportation coordinator's work program; a time budget for assistance from other departments; recommendations for additional staff or committee support; details of any proposed cooperative activities with other employers; and a program budget. It may be appropriate to present several alternative proposals to management, detailing what would be accomplished at two or three levels of time and money commitment. In any case, you should be ready to suggest alternatives to program elements that do not meet with approval.

Developing Incremental Programs

Your company may not be ready to make a commitment to develop an overall commute alternatives program. The number of employees may be too small, financial resources too limited or transportation problems not significant enough to warrant a full program. Top management may prefer to experiment with one transportation alternative measure before beginning another. In this case, the coordinator should develop a detailed plan for implementing and evaluating the chosen strategy and keep management informed of its progress and results. If the program is successful, other strategies may be added incrementally.

THE MECHANICS OF PROGRAM ADMINISTRATION

Establish Visibility

Make your existence as a transportation coordinator known to fellow employees. Invite employees with transportation concerns to visit or call you. A kick-off event, such as a transportation fair, may be used to draw attention to your program (see the Marketing section of this chapter); or, you may announce your presence through company newsletters or staff meetings.

Set Up the Administrative System

You will need to devise ways to keep track of program activities, progress and results. You will also need to set up any special systems needed for your program. For example, if you decide on an internal carpool-matching program, you should set up a card file or computer program to do the matching. If you offer preferential parking for carpools or vanpools, you must develop a system for issuing permits and monitoring their use.

Establish Support Committees

Establishing support committees within the company is very important. There are two types of committees that may prove useful to you: a policy committee and an employee task force. A group of management people from relevant departments such as personnel, parking or fleet management may meet regularly as a policy group to advise the coordinator and to develop company transportation policies. An employee task force usually consists of staff members who use various commute alternatives. This type of committee may be organized as a standing committee, or you may set up special purpose committees to work on specific programs. For example, a group of bicycle commuters may form a committee to assist others in cycling to work or to recommend facilities or street improvements; or a task force may be set up to assist in developing and implementing flex-time programs. A task force can help you evaluate program proposals before presenting them to management. Both types of committees involve more people in the program, provide assistance in promoting the program, and provide feedback on program success.

Establish Contact With Nearby Companies

There may be transportation coordinators in the companies nearby. If so, it is a good idea to form an association to meet regularly to exchange ideas, share information and to consider the possibility of joint projects. If there is no coordinator, there may be a person with some responsibility for transportation issues. Establishing a means of contact may enable you to add nearby employees to your ridesharing groups as they form or to propose a jointly funded shuttle service.

Establish an Information Center

There should be an easily accessible space within the company for you to set up a rack of transit schedules and maps, ridesharing brochures and applications (see Contacts list for information on ordering display racks). The information center should include a bulletin board or a display area for maps and marketing materials that you develop.

Table 23 summarizes the steps to commute alternatives program development.

TABLE 23

COMMUTE ALTERNATIVES PROGRAM DEVELOPMENT

Establish a Broad Company Policy:

- Clarify company goals and objectives.
- Propose a policy statement for adoption.

Gather Information:

- Orient yourself to the job.
- Familiarize yourself with the transportation system.
- Gather data on employee locations.
- Survey employee travel habits.

Develop a Program:

- Determine appropriate alternatives.
- Evaluate the impacts of available tax incentives.
- Investigate options for implementing each alternative.
- Set realistic goals.
- Develop a marketing plan.
- Develop a company transportation policy and program budget.
- Develop your work program.

Gain Management Support:

- Address management concerns.
- Present a complete program proposal.
- Develop a program incrementally, if necessary.

Set Up the Mechanics for Administering the Program:

- Establish visibility.
- Set up the administrative system.
- Establish support committees.
- Establish contact with nearby companies.
- Establish an information center.

MARKETING

Marketing the commute alternatives program is a major part of the transportation coordinator's job. There are many marketing activities that should be part of any commute alternatives program. These activities are discussed in this section; they may begin right away, before you have developed your complete program. But, in the long run, a planned approach will be more effective than random marketing efforts. Your overall program should include a well-defined marketing plan.

BEGINNING MARKETING ACTIVITIES

New Employee Orientation

Perhaps the most effective marketing tool is to make commute alternatives a regular part of the orientation of new employees. New employees are in the process of changing commute habits and are also receptive to information on the programs and benefits the company offers. The transportation coordinator should participate in new employee orientation meetings or organize special meetings. Transportation information should also be included in new employee packets. Include a statement of the company transportation policy, a ridesharing application, transit maps and your telephone number and office location.

Transportation Guide

One of the most effective pieces of written information you can develop for your marketing program is a Transportation Guide. These can be simple, one-page affairs or a more complex booklet or map. The object is to provide a simple guide of how to get to your location. Usually one side of a page consists of a map showing transit and vanpool routes; the reverse side should have your name, office location and phone number, along with information on company incentives. The guide should be distributed to all present employees, and given out to new employees at orientation.

Ridesharing Campaign

A full-scale ridesharing campaign can be conducted immediately through RIDES or your local ridesharing agency or later when your internal program is fully operational. The ridesharing organizations will assist you in conducting the campaign. (See the Ridesharing Chapter.) A ridesharing campaign should be repeated regularly. Personal follow-up with applicants is also important.

The Transportation Fair

The transportation fair can be held over a lunch hour or over several days. A successful lunchtime fair was held at Hewlett-Packard in Palo Alto. The fair was organized as a casual and fun-filled event. The transportation coordinator encouraged people to come to work in a variety of innovative ways; the modes included bicycles, roller skates, jogging, even a unicycle and a rickshaw as well as a number of horses. Various booths were set up: a RIDES demonstration van and staff to take applications; the Santa Clara County Transit District and Samtrans to provide service information;

Hewlett-Packard-sponsored vans; electric cars; and bicycles and mopeds from a local bikeshop. The fair was promoted both internally to employees and externally to adjacent companies. Staff volunteers participated in the organization and promotion.

A fair such as the Hewlett-Packard event serves several purposes: It gets publicity for the program and the transportation coordinator; it provides information to employees; it encourages people to think about a change in commute habits; and it has a positive influence on the company's image with employees and with the community.

Employee Meetings, Slide Shows and Movies

Employee meetings may be organized to talk about transportation in general or to present a new program. Meetings may be held regularly or a display may be set up in the company cafeteria. Film and slide shows are available on various alternatives or may be developed by the coordinator (see Reference list in the Ridesharing Chapter).

News Items and Press Releases

The regular inclusion of news items in the company newsletter will bring attention to the program. These may announce specific program events, give information on particular alternatives, or give recognition to ridesharing or cycling commuters. Press releases should be issued to local news media whenever something noteworthy occurs. Start-up of company-sponsored programs such as vanpools and shuttles should be well-publicized.

Maintain Continuous Visibility

Publicity-oriented events will generate attention for the program and visibility for the coordinator. But not many employees will follow through with an immediate commitment to a commute alternative. You must ensure that your program has enough continuous visibility so that employees will know where to go for assistance when they are ready to make a change. Continuous visibility requires using every information channel in your organization — bulletin boards, newsletters, paychecks, walls, memos. Each communication should include your name and phone number. Keep an open office and maintain an accessible information center.

Set Up an Information Center

Establish and publicize a central place for transportation information and keep the material up-to-date. Include transit maps and schedules, ridesharing applications, bicycle club news, etc. Some coordinators make portable displays which may be set up periodically in the cafeteria.

Provide Information on Employee Tax Incentives

A \$7 per month state income tax deduction is allowed for the cost of commuting by rideshare vehicle or public transit. This incentive may be used to market ridesharing.

Emphasize the Personal Touch

The discussion of each of the above elements of a transportation program has emphasized personal contact and direct assistance. This personal approach is essential for marketing external ridesharing and transit marketing programs, which can appear intimidating and impersonal. The transportation coordinator has the important job of providing the person-to-person follow-up for these programs. This includes such activities as playing go-between for potential carpool matches, setting up vanpool meetings, and providing individual transit-trip planning assistance.

Table 24 lists various marketing activities to include in your program.

TABLE 24
MARKETING ACTIVITIES

- **New employee orientations** and information packages are important marketing tools since new employees are changing their travel habits.
- **A company transportation guide** listing all commute alternatives and sources of information can be handed out to employees and visitors.
- **Ridesharing campaigns** gather new data and update old data on application forms and start employees thinking about alternatives.
- **Transportation days or fairs** are entertaining and attention-getting ways to alert employees to the program.
- **Employee meetings, slide shows and movies** make the program more visible, provide information and are a means of getting employee feedback.
- **Items in the company newsletter** keep the program visible and give recognition to employees who use alternative transportation.
- **Press releases** to the local news media create good public relations.
- **General ongoing publicity** in the form of posters, bulletin board displays or memos creates visibility and informs employees of the program and its successes.
- **Current transit information** should be readily available on site.
- **Meetings arranged between potential carpool or vanpool members** help alleviate hesitations about commuting with strangers.
- **Personal assistance** to employees interested in a new commute mode is a very strong inducement. It should be an integral part of the overall program.

REFINING THE MARKETING PLAN

Analyze the Market

The first step in developing a more refined marketing plan is to analyze the market — the employees in your company — and to identify their transportation habits, preferences, attitudes and needs. This can be done through surveys and other feedback methods.

Survey Employee Residence Locations and Travel Habits

The basic survey used to gather information for the initial program development is also useful in designing a marketing campaign. Long and short model surveys and the survey currently being used by the Santa Clara County Transit District are included in the Appendix. SCCTD will assist employers in Santa Clara County in using the survey and processing the data. RIDES and Golden Gate ridesharing applications may also be used for the basic survey (see the Ridesharing Appendix). The survey and other information on employee residence locations will tell you which employees are potential candidates for each commute alternative. The survey analysis will also identify geographic areas where employees are already ridesharing or using transit so that the

trend can be reinforced with targeted promotions.

Surveying Employee Attitudes

The same survey or another more complex survey may be used to gather additional information on employee attitudes concerning the various commute alternatives or potential incentives. There are several different ways to ask for this type of information:

1. **Ask open-ended questions.** These questions ask respondents to state their problems or concerns about transportation or list the alternatives or incentives they would be interested in. Examples would be:

- What would make transit more convenient or attractive to you?
- What are the reasons you don't carpool to work?
- What is your biggest problem or complaint about getting to or from work?

The drawbacks of using these kinds of questions are that the results are much harder to analyze than multiple-choice questions and the problems may not come to mind readily.

2. **Ask for responses to specific choices or proposals.** Such questions are included in the longer model survey in the Appendix. For example:

Which of the following would make carpooling more convenient or attractive to you? (Please check only those you feel would make a real difference.)

- ☐ If I could locate a fellow employee who lives close by.
- ☐ If the company reserved parking spaces for carpools close to my work unit.
- ☐ If I could change my working hours somewhat.
- ☐ If I could pool regularly, but only two or three days a week.
- ☐ Other:

Another example is:

If a transit subsidy were offered, would you take transit to work?

- ☐ Yes
- ☐ No

The main problem with this type of question is that respondents who feel that they are being offered something have a tendency to respond positively. Their later behavior may *not* match their response; i.e., they may not take transit if given a subsidy even though they said they would. The respondents may also consider specific questions to be a promise that the incentive will be provided. The survey should only mention program actions that are possible. The coordinator can then estimate the likely response.

3. **Try to determine the reasons people are unable or reluctant to consider an alternative means of getting to work.** This can be accomplished through open-ended questions as mentioned above, or by providing a list of objections to each alternative. An example of this type of question is the following:

Which of the following deter you from carpooling? (Check as many as apply.)

- ☐ I live close to work so it's not worth going out of my way.
- ☐ When work is over, I like to be on my own.
- ☐ It's a hassle waiting for someone else so you can ride together.
- ☐ I don't know anybody to ride with.
- ☐ I've asked around, but I can't find anyone to pool with.
- ☐ I need the car during lunch hours.

- ___ I use the car for business during the day.
- ___ My schedule doesn't fit into a regular routine.

A possible problem with this type of questioning is that it may reinforce employees' negative feelings about the alternatives. Its purpose is to provide you with information on negative attitudes so that you may design a marketing campaign or incentives aimed at neutralizing those objections. Examples of how to do this are discussed in the paper on carpool marketing in the Appendix.

Whichever type of survey is used to gauge employee attitudes, it is important to achieve a good response rate. If only those who are most interested in transportation respond, you can run the risk of designing a campaign that appeals only to the easy cases. Personal contact, designing a reasonably short, simple survey, and encouragement from the chief executive officer are all ways to achieve a good response.

Other Employee Feedback

Other methods of identifying employee concerns include: setting up a suggestion box; publicizing your availability and your phone number; and holding small group meetings or setting up a task force. The smaller the company, the more you will be able to personally discuss transportation with fellow employees. In larger companies, you might establish a network of contacts in various departments.

Target the Campaign

For best results, focus your marketing efforts on particular target groups. Survey data will help you to identify these groups. A personalized approach should be used to reach members of the following target groups:

Geographical Target Groups

Employees who live at the appropriate distances from work and in areas where fellow employees are clustered are prime targets for ridesharing groups. One way to target these groups is to arrange coffee-and-doughnut meetings for employees who live in the same area. Employees who live closest to transit routes are candidates for personalized trip-planning assistance, or you might ask neighbors who are transit users to assist them in trying transit.

Attitudinal Target Groups

The transportation coordinator also responds to the transportation interests and problems of fellow employees. For example, you might identify persons whose interest in physical fitness and energy conservation is strong and who wish to cycle to work. You might respond by arranging for bicycle parking or shower facilities or putting them in contact with cycle commuters who can assist them in planning their trip. Or, you might investigate the problems employees experience in using transit and use this information to negotiate with transit agencies for improved service.

New Employees

New employees are a primary target for two reasons: They are in the process of changing their commute pattern, and they are learning about the company's programs and benefits. The best way to reach this group is with a complete package of transportation information and, if possible, personalized orientation sessions and assistance.

Employees Who Have Recently Transferred or Moved

Employees who have transferred to a new site or have moved their place of residence are also targets for personal attention, as they will also be changing their commute habits.

People Who Can (and Will) Use Alternatives

As you begin to market your program, you will become familiar with the reasons people can't (or won't) consider ridesharing or other alternatives. These include: they need the car at work; they must drop off children at child care centers; they have very irregular hours; they go on to second jobs or classes after work. Sometimes these are legitimate reasons for not ridesharing or using transit. It is best to focus your energy on employees who can use alternatives.

Employees who insist that they must drive alone to work can be given information on fuel-efficient driving techniques. A brochure, *10 Fool-Proof Ways to Save Gas*, is available from the California Energy Commission (see Contacts).

Further Information

A further discussion of refining and targeting a marketing program, *An Ambitious Carpool Marketing Plan for the Fully Committed Organization*, is included in the Appendix.

OFFERING INCENTIVES

There are a variety of incentives that your company can offer to encourage transit and ridesharing use, as well as changes in commute habits in general.

Parking

Companies have traditionally provided as much parking as the work site will allow. Employee parking benefits come in the form of free parking in a suburban location, preferred locations for key personnel, or low parking rates for employees in congested urban areas.

Your commute alternatives program can expand the use of parking as an employee benefit. Preferred locations can be provided to ridesharing vehicles. Free parking or cut-rate parking can be provided for carpools and vanpools at facilities that currently charge for employee parking. Given the escalating costs of providing parking lots and structures, simply not providing as much parking is an incentive to ridesharing in itself; if parking is limited and ridesharing vehicles get preferred parking locations and, where appropriate, preferred rates, then a powerful incentives package has been developed. (See the Parking Management Chapter.)

Flex-time

A chapter of this manual is devoted to work hour alternatives. Allowing some form of flex-time — even if it is limited to a half-hour variation for commute reasons only — creates an incentive that most employees greatly appreciate.

Financial Subsidies

Many companies provide a variety of direct financial subsidies. Some will subsidize seats in a vanpool in an effort to assist in getting the pool started. Some provide discounts on the cost of monthly transit passes. A number of Bay Area hospitals provide a month's free transit pass as a promotional device, either to new employees or

at a regular lottery. General Electric provides weekly cash awards. Subsidies may be controversial due to their direct cash costs; usually it is appropriate to calculate direct benefits to your company to justify costs.

A list of examples of incentives programs is provided on Table 25.

TABLE 25
INCENTIVE PROGRAMS

- **Free or reduced rate parking.** Bank of America in San Francisco offers free parking for a carpool of four or more, approximately one-third the regular fee for three persons, and two-thirds for two persons. Children's Hospital allows ridesharing groups of three or more to park free and a \$5 reduction in parking fees for two-person pools.
- **Preferential parking.** The Lawrence Livermore National Laboratory and Fireman's Fund programs offer close-in parking for vanpools and carpools.
- **Transit subsidies.** Shugart Associates in Sunnyvale offers free transit tickets to employees.
- **Company sponsored shuttles to connect with transit.** Hospitals in the "Pill-Hill" area of Oakland jointly sponsor a shuttle to BART; Children's, Marshal Hale, and St. Mary's hospitals jointly sponsor a shuttle service from southeast San Francisco to the hospitals; several employers in the Stanford Industrial Park initiated a shuttle to the Southern Pacific Station.
- **Alternative working hours.** Several companies have adopted flex-time or staggered work hours as an adjunct to alternative transportation programs.
- **Transit shelters and staging areas.** Lawrence Livermore Laboratory and ROLM Corporation have purchased bus shelters for their sites.
- **Drawings for alternative mode commuters.** ROLM Corporation has drawings every six months for the cash equivalent to stock value; Lockheed Missiles and Space, Co. has weekly drawings awarding 10 gallons of fuel to all riders in the selected carpool or vanpool.
- **Cash incentives.** Optical Coating Laboratory, Inc. (O.C.L.I.) in Santa Rosa offers daily cash incentives — carpools with three or more get \$1; bicyclists, walkers, bus riders and motorcyclists get 50 cents. A monthly drawing is held for double the amount of money earned.
- **Financial subsidies for bicyclists.** The city of Palo Alto pays 7 cents a mile for bicycle business trips; a trucking firm in Eugene, Oregon, pays employees \$40 a year for maintenance of their commute bicycles.

USING AVAILABLE RESOURCES

Various agencies and organizations have marketing materials and assistance available for your use. The major Bay Area sources of assistance are RIDES and the transit operators. In the North Bay, Golden Gate Ridesharing Division will assist with marketing ridesharing. These organizations can all provide posters and other marketing materials and bring vehicles to the work site for demonstration purposes. (Refer to the Contacts list in the Ridesharing and Transit chapters.) Other resources have been mentioned in the previous sections. Private vehicle-leasing companies also offer assistance with ridesharing programs.

The *Carpool Handbook*, available from MTC, has a good list of incentives on pages 22-23. It is also a good idea to join or form an association with other transportation coordinators. Groups of coordinators may work out arrangements to share the design of promotional materials or survey instruments or cooperate in the purchase of display boards or audio-visual equipment.

PROGRAM MAINTENANCE

The previous discussion of program marketing has emphasized continuous visibility and personalized attention. The other ongoing elements of a commute alternatives program are program maintenance and evaluation.

It is important to remember that while a large part of the coordinator's job is marketing, the coordinator is also providing a service. In order to do a good job of providing this service, each part of the commute alternatives program must be *continuously maintained, monitored and updated*.

UPDATING YOUR INFORMATION

You will need to continuously update your information on the transportation system, employee commute habits and attitudes, and company concerns. You will also need to keep track of new information on available options and costs. Federal, state and local government policies and plans will also affect your programs. Federal and state energy contingency plans may require employer programs with specific goals. New financial incentives may be introduced at the federal or state level.

MTC will convey to coordinators significant information affecting transportation programs and will assist coordinators with specific questions. Coordinators should also maintain periodic contact with the transit operators and ridesharing agencies (perhaps requesting a full information update or new ridesharing campaign annually).

An annual repeat of the basic survey of employee travel patterns will provide information which will aid in continually improving your marketing programs as well as help in evaluating program success. A system should be established to receive constant information from personnel on new employees and employees who move.

MAINTAINING THE PROGRAM

Each commute alternative strategy will need constant attention and maintenance. For example:

Ridesharing Programs

Whether you participate in a RIDES, Golden Gate or Santa Clara County Transit District program or develop your own internal ridesharing program, the following activities must be performed regularly:

Update the Data Base

You will need to remove the names of employees who have left, have already found a ridesharing group, or are otherwise no longer interested in receiving calls. You should add the names of interested new employees as quickly as possible and change the residence information for employees who move. Carpools or vanpools that have been filled should be removed from the active list.

If you use RIDES' services, they can update this information through regular campaigns and periodic purges of their data base. You can assist them, however, and

provide better matching services for your fellow employees, by providing regularly updated information to RIDES.

Replace Members of Ridesharing Groups Who Leave

When a member of a carpool, vanpool or buspool group decides to leave, he/she should inform you immediately so that you can actively seek a replacement.

Participate in New Employee Orientation

Attend orientation meetings and make sure ridesharing information and applications are part of the new employee package.

Periodically Repeat the Ridesharing Campaign

At any given time that you conduct a general ridesharing campaign, only a small percentage of employees will be interested in changing their commute mode. As your program becomes more visible, others who are interested will seek your assistance. However, to achieve best results you should repeat a full ridesharing promotion and application process at least annually. This will prod additional employees into considering ridesharing and add to the program's visibility. It will also serve as a general update of your ridesharing data base. You should inform employees of the results achieved since the last campaign, and encourage new ridesharers to promote the idea among their fellow employees.

Transit Programs

Keep information on routes, fares and schedules current. Inform employees of the results of any service negotiations with transit operators. Continue to provide personal assistance to new employees. Periodically reevaluate the potential use of a shuttle service. Evaluate existing shuttle service and buspooling operations and negotiate with transit operators to take over the service.

Cycling and Walking Programs

Add more bicycle lockers or racks as they become necessary. Encourage an ongoing bicycle commuter association and refer interested new employees to the group. Become involved in the city's planning for bicycle and pedestrian safety improvements (most funding programs are on an annual cycle).

Parking Management

Once you have established the guidelines of a parking management program, you will need to oversee the administration and monitoring of the system. You may be responsible for the continuing registration of carpools or vanpools and issuing permits. Though program enforcement and collection of fees may be accomplished by another department, you should continuously monitor the system for problems. You may need to provide for more preferential spaces, more or less frequent registration, stronger enforcement, or greater financial incentives.

Alternative Working Hours

It has been suggested that a flex-time or staggered hours program be introduced on an experimental basis in one department. You will be involved in evaluating the success of the experiment and modifying the program guidelines. Once the program is adopted throughout the company, it will need to be maintained. The most significant aspect of maintenance is to inform new employees of the program's existence, and make sure

that supervisors and employees remain aware of the degree of flexibility that is permitted.

Incentive Program

Keep track of the use, effectiveness and costs of incentive programs. Be ready to propose new incentives you feel would make a program more successful. Be alert for sudden opportunities to give meaningful incentives; for example, ensuring fuel supplies for vanpools at company pumps during a gas shortage.

EVALUATING AND REPORTING ON THE PROGRAM

The records you keep of each program and the periodic employee surveys you conduct will allow you to evaluate the program's success and continuing potential. Annually, you should review this information and report each of the following facts to management:

- The number of employees who have switched from driving alone to alternative transportation, and the alternatives they choose.
- The remaining market for each alternative.
- The decrease in the number of vehicles arriving at work and any decrease in parking space requirements.
- The number of employees who take advantage of each of the incentives offered and the cost of those incentives.
- An evaluation of the actual costs and benefits of any company-sponsored programs (such as a shuttle bus or vanpools) compared to the estimated costs. Quantify the benefits provided by government incentive programs, and include a report on any liability problems that may have occurred.
- A report of any successful negotiations for transit or roadway improvements.
- An assessment of the coordinator's visibility with fellow employees.
- A progress report on the transportation coordinator's achievements based on the original work program.

OBTAINING FEEDBACK AND DEVELOPING A NEW WORK PROGRAM

You should request feedback on your program's results from the chief executive officer as well as your immediate supervisor. You should also report to any advisory committees and ask for feedback. You will then be in a position to develop a work program of tasks for the next year. The program should include recommended modifications to existing programs and additional programs or incentives.

CONTINUING YOUR PROFESSIONAL DEVELOPMENT AND ASSOCIATIONS

Professional Associations

The benefits of working jointly with nearby companies and creating coordinator associations have been emphasized throughout the manual. An example of this type of organization is the San Francisco Joint Institutional Brokers' Association. The Santa Clara County Manufacturing Group has organized coordinators in the county in zone

associations which hold regular meetings. Associations are also beginning in Contra Costa County and in the East Bay, and the city of San Francisco hopes to help form a downtown coordinator's association. Also, MTC can assist in identifying other coordinators in your area. Membership in a coordinator group and attendance of workshops, conferences, and other transportation programs will contribute to your professional development and should become an ongoing part of your commute alternatives program. Membership in the Association of Ridesharing Professionals, a recently formed national organization, should also be considered. More information may be obtained by calling or writing the person listed in this chapter on the Contacts list.

Metropolitan Transportation Commission

As mentioned previously, MTC has published a supplement to this manual, the *Carpool Handbook*. Supplements on driver efficiency and fleet management programs to conserve fuel will be produced in the near future. MTC also publishes a bimonthly newsletter, the *Coordinator Connection*, and offers workshops on such topics as marketing and data collection. MTC also will be collecting more information on existing coordinator programs and sending coordinators regular updates of program examples and contact persons.

CONTACTS

Marketing Resources

- Golden Gate Ridesharing Division
Dee Lukshin, Outreach Services Coordinator
Maria Thayer, Ridesharing Coordinator
(415) 921-5858
- RIDES for Bay Area Commuters, Inc.
Mindy Kershner, Director, Employer Services
(415) 861-POOL
(408) 996-POOL
- Santa Clara County Transit District
Jan Wessel
1555 Berger Drive
San Jose, CA
(408) 299-4141
- Transit Operator Marketing Departments
(See the Contact list in the Transit Chapter)

Information on Ordering Plastic Schedule and Brochure Display Racks

- Berkeley TRiP
Laurie Udell
1834 University Ave.
Berkeley, CA 94703
(415) 644-POOL

Information on Fuel Efficient Driving

- California Energy Commission
Publications Unit
1111 Howe Ave.
Mail Station 50
Sacramento, CA 95825
(916) 920-6216

(For the CEC staff pamphlet, developed in cooperation with Chevron, U.S.A., *10 Fool-Proof Ways to Save Gas* and information on the Gas CAP-Gasoline Conservation Awareness Program.

SB 321 Tax Incentive Forms

- California Franchise Tax Board
Sacramento, CA 95867

Company Programs

- Chevron
Sheila Moura, Employee Relations
P.O. Box M, Section 17
Concord, CA 94524
(415) 827-6398
- Children's Hospital and Marshal Hale Hospital
Cliff Chambers, Transportation Broker
3700 California St.
San Francisco, CA 94118
(415) 864-7552, ext. 246

- Fireman's Fund Insurance Co.
Dan Townsend, Director, General Services
777 San Marin Drive
Novato, CA 94998
(415) 899-2091
- General Electric Co., San Jose
Burt Epstein
Mail Code #402
175 Curtner Ave.
San Jose, CA 95125
(408) 925-1649
- Hewlett Packard
Wayne Herriford, Transportation Coordinator
Building 20-AM
3000 Hanover
Palo Alto, CA 94304
(415) 857-1501
- Lawrence Livermore National Laboratory
Joe Podrosky, Ridesharing Coordinator
Laboratory Transportation Coordination Office
P.O. Box 808, L-426
Livermore, CA 94500
(415) 422-7665
- ROLM Corporation
Charlene Rottler, Transportation Coordinator
Mail Stop 461
4900 Old Ironsides Drive
Santa Clara, CA 95050
(408) 496-0550, ext. 5241
- University of California, San Francisco
Jim Wood, Transportation Officer/Lee Clark, Transportation Broker
Transportation Services
11 Irving Street, Room A-C14
San Francisco, CA 94143
(415) 666-1511

Incentive Programs

- Bank of America
Lois McLain, Transportation Coordinator
180 Montgomery St., 25th floor
San Francisco, CA 94108
(415) 622-6248
- City of Palo Alto
Gayle Likens
Transportation Division
P.O. Box 10250
Palo Alto, CA 94303
(415) 329-2136
- Hospital Services, Inc. (Oakland "Pill Hill" Shuttle)
Sandra Snyder, Director
2976 Summit Street, 2nd Floor
Oakland, CA 94609
(415) 465-1627

- Lockheed Missiles and Space Co.
Cecil Pennington or Pat Mooney
P.O. Box 504
111 Lockheed Way
Sunnyvale, CA 94086
(408) 743-2603
- Optical Coating Laboratory, Inc.
Bob Donovan
P.O. Box 1599
Santa Rosa, CA 95402
(707) 545-6400, ext. 558
- Shugart Associates
Judy Fisher-Echols
475 Oakmead Parkway
Sunnyvale, CA 94086
(408) 733-0100, ext. 2303

Coordinator Associations

- Association of Ridesharing Professionals (ARP)
Wyndham B. Blanton, III, President
Transportation Development Engineer
County of Henrico, Virginia
P.O. Box 27032
Richmond, VA 23273
- Downtown San Francisco Coordinator Association
Dave Feltham
Department of City Planning
100 Larkin St.
San Francisco, CA 94102
(415) 558-5423
- Joint Institutional Transportation Brokers' Association (JITBA)
Phil Eubank, President
St. Mary's Hospital and Medical Center
450 Stanyan St.
San Francisco, CA 94117
(415) 668-1000, ext. 8450
- Santa Clara County Manufacturing Group
Edie Dorosin, Vice-President
12 South First St., Suite 1220
San Jose, CA 95118
(408) 947-8300
- Other Coordinator Associations
Shanna O'Hare
MTC (415) 849-3223
or Mindy Kershner
RIDES (415) 861-POOL

Continuing Education

- MTC, Commute Alternatives Program
Susan Bachman, Program Director
or Shanna O'Hare, Program Administrator
Metropolitan Transportation Commission
Hotel Claremont
Berkeley, CA 94705
(415) 849-3223

(Also contact MTC to be added to the mailing list for the Coordinator Connection newsletter, to receive invitations to workshops, or to suggest topics for newsletter articles or workshops.)

APPENDIX

- ROLM Corporation Transportation Policy
- Model Transportation Coordinator Job Description (MTC)
- Marshal Hale Hospital Transportation Coordinator Work Program
- Example: Transportation Coordinator Work Calendar (ROLM Corporation)
- Maps: Use and Availability (MTC)
- Model Initial Transportation Survey (MTC)
- Model Detailed Transportation Survey
- Santa Clara County Transit District Transportation Survey
- State Franchise Tax Board Ridesharing Credit Form
- *An Ambitious Carpool Marketing Plan for the Fully Committed Organization*, by Dr. David W. Jones, Jr.

MEMORANDUM

TO: Transportation Committee

COPY:

FROM: Roberta Gray

Roberta

DATE: June 10, 1980 - REVISED June 17, 1980

18

SUBJECT: TRANSPORTATION PROJECT

The Transportation Project is now nearly six weeks old. It seems appropriate to provide the committee with a status report at this time. It is essential to determine if the direction the project is taking is one with which the committee concurs. The attached Transportation Project Report provides background and explanation of the recommendations herein.

Recommended Policy Statement

"ROLM, in order to ensure the continuity of manufactured goods and services, endorses the use of alternate modes of transportation, as opposed to the single driver car, for all employees wherever possible when commuting to and from work or traveling on company business, which will also:

- Relieve traffic congestion;
- Reduce air pollution;
- Reduce employee costs for getting to and from work;
- Reduce employee stress due to commute driving; and
- Conserve energy.

Further ROLM provides support and special incentives to increase participation in walking, bicycling and ridesharing programs including carpools, vanpools and public transit."

Recommended Goals

GOAL: Provide adequate employee education, support and incentive programs for transportation alternatives in order to reduce the proportion of single driver cars commuting to and from ROLM to less than fifty percent of the total number of ROLM employees by 1983. Targets for 1981 and 1982, as well as for 1983. This will require base line data which may not be fully available until after the Transportation Fair. Targets for the years 1981 and 1982 will be produced as soon as possible.

GOAL: Provide shared-ride van and/or bus transportation for groups of employees traveling off-site for meetings or other business related functions by early 1981.

- GOAL: Provide increased coordinated and publicized shuttle service between buildings and sites to eliminate the use of private vehicles for such trips by mid-1981.
- GOAL: Establish conservation-oriented criteria for selection of company vehicles before 1981.
- GOAL: Provide a source of on-site fuel for company and ride-share vehicles before 1981.
- GOAL: Design all future site facilities so that preferential parking for ridesharers is emphasized.

Proposed Approaches

- In order for a program of this type to succeed it must have the full support and some active participation on the part of top level managers.
- The Transportation Program needs to be seen as an active, enjoyable benefit somewhat akin to the Recreation Program.
- Creative alternative modes of transportation need to become the ROLMan "thing to do" in business as well as commute travel with participation openly recognized and rewarded.
- Each employee's transportation problems should be addressed on an individual basis whenever possible.
- Each employee should be given the greatest number of transportation alternatives possible so that the employee may choose a mode that is best suited to him or her.

Proposed Timelines

- | | |
|-----------------------|--|
| July 15, 1980 | - Report to committee on onsite fuel |
| August 29, 1980 | - Complete arrangements to have on site fuel. |
| | - Report to committee on First phase - Long Range Program Plan |
| September 22-26, 1980 | - Transportation Fair |
| October 1, 1980 | - Begin portions of Long Range Program. |
| | - Conduct free bus pass month. |
| December 15, 1980 | - Report to committee on completed Long Range Program Plan. |

Transportation Coordinator Job Description

The Position

A full or part-time job with primary responsibility for developing and implementing a full-range transportation program, focusing on commute alternatives.

Qualifications

- o A self-starter with the ability to work independently, be organized, and keep track of details.
- o Able to establish and maintain cooperative working relationships with fellow employees and senior management, as well as interact with fellow employees in an effective and courteous manner.
- o Ability to problem solve, analyze data and commute alternatives, and to write and communicate clearly and concisely.
- o Knowledge of various commute and transportation alternatives is very useful.

Typical Tasks

- o Develop and implement a variety of specialized transportation programs for the benefit of both fellow employees and the company.
- o Accurately assess the needs, priorities, and benefits of various transportation programs; develop and implement those programs best suited to your company or institution.
- o Develop and implement a variety of marketing and promotional activities.
- o Develop and implement a carpool program; investigate possible vanpool or buspool programs.
- o Develop and implement a parking management program designed to encourage ride sharing.
- o Inform fellow employees of available transit service; promote transit in various ways, including sale of on-site monthly commute passes; analyze and recommend improvements in transit service that will benefit fellow employees.
- o Regularly explain and present your program to new employee groups; speak before other employee groups, and neighborhood and public agency meetings.
- o Conduct surveys, regularly evaluate the results of the program, prepare reports on your progress.

CLIFF CHAMBERS, TRANSPORTATION BROKER
MARSHAL HALE HOSPITAL
SIX MONTH WORK PROGRAM

The work I will be doing during the next six months can be broken into 6 categories:

- I. Ridesharing: principally carpools, van pools and club buses
- II. Parking management: Neighborhood Preferential Parking District
- III. Transit information/Transit improvements
- IV. Internal public relations
- V. Consultant liaison
- VI. Institutional coordination

I. RIDESHARING

A. Van Pool Program

In cooperation with Rides for Bay Area Commuters and Golden Gate Vanpool, a van pool program for employees will be initiated. The basic steps of this process are:

- 1. Acquire a list by zip code of all employees living outside San Francisco.
- 2. Draft and approve a cover letter. Print letter.
- 3. Obtain Golden Gate's Vanpool display for use on the wall in the cafeteria.
- 4. Have a demonstration van visit Marshal Hale Memorial Hospital. Find location and publicize.
- 5. Vanpool letters to employees will be distributed through department heads. With the letter will be a descriptive brochure with an application.
- 6. Receive back applications and sort geographically.
- 7. Cross-tab results with CHSF returns.
- 8. Hold a follow-up workshop for all applicants.
- 9. Once a sufficient number of applicants from a geographical area show interest, a new vanpool can be started.
- 10. New vanpools will park in Level I of CHSF Cherry Street lot. (Still has to be finally approved.)

B. Carpool Program

- 1. Attempt to place all vanpool applicants who did not have a sufficient number of applicants in their area in a carpool.
- 2. Again, this effort can be cross-tabbed with CHSF.
- 3. Coordinate this effort with the Caltrans Rides program.
- 4. Find preferential parking spaces for carpools of three or more.

C. Subscription Bus Service

1. Place interested people onto Fireman Fund's buspools from Marin County.
2. Explore participation with UCSF and other institutions.

II. PARKING MANAGEMENT

1. Keep in touch with Norman Bray's office on Preferential Parking development.
2. Make recommendations on possible exclusions from the District.
3. Attend all Preferential Parking meetings for this area.
4. Troubleshoot any potential problems with proposed logistics that may have an impact on the operation of MHMH.

III. TRANSIT INFORMATION/TRANSIT IMPROVEMENTS

1. Begin work on a "Transportation Guide to MHMH" pamphlet.
2. Research the idea of placing a permanent wall map showing the routes and frequencies of MUNI service to MHMH.
3. Find a place and stock a transit information rack.
4. Advertise fast Pass sales at CHSF.
5. Encourage and lobby for the proposed cross-town #33 bus route before preferential parking becomes effective.

IV. INTERNAL PUBLIC RELATIONS

1. Establish some visibility. Possibly establish a regular table twice a week during lunchtime; possibly one hour a week visibility for PM shift.
2. Make presentations on programs to departmental meetings.
3. Establish a regular column in the MHMH newsletter.
4. Attend new employee orientation sessions.

V. JOINT TRANSPORTATION GROUP CONSULTANT

1. Act as a liaison between the consultant and the hospital administration.
2. Assist consultant with the employee survey questions.
3. Evaluate consultant work. Insure that MHMH gets useful information from the study.

VI. INSTITUTIONAL COORDINATION

1. Attend all Joint Institutional TSM meetings.
2. Work with transportation brokers at other institutions.
3. There will be a lot of joint efforts in my capacity at both CHSF and MHMH.

TRANSPORTATION COORDINATOR SAMPLE WORK CALENDAR

(ROLM Corporation)

DAILY/AS NEEDED

WEEKLY

MONTHLY/BIANNUALLY

- BUS
- o map bus routes for employees
 - o maintain bus schedules rack
 - o write letters to transit re: employee problems
 - o prepare transit information sheets

- o sell transit passes
- o record transit pass purchasers for stock drawing
- o remit payment to transit and submit new pass order

CARPOOL

Application

- o locate residence grid and enter application on data base entry form
- o flag residence on matching map
- o forward applications to RIDES, if indicated

- o advise facilities maintenance and security of carpool slots assigned
- o make carpool I.D. tags
- o give carpoolers I.D. tags and memo explaining parking procedures

New Carpools

- o register carpool, assign number and parking space
- o request carpool number stenciled on parking space
- o enter carpool on data base entry form and flag on matching map

- o request carpools to reregister for parking spaces every 6 months

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VANPOOL

- o keep vanpool driver applications on hand
- o keep RIDES vanpool information on hand

BICYCLE

- o monitor daily locker use

- o administer bike locker rental

MARKETING

- o prepare posters and marketing materials
- o prepare questionnaires for specific groups

- o attend new employee orientation
- o arrange, publicize, and conduct task force meeting (e.g., bicycle group)
- o arrange and conduct specified zip code meeting
- o write article for employee newsletter

MAPS: Use and Availability

Two types of maps are very useful to the Transportation Coordinator. The first type, for use as a large wall map to display locations of employees, carpool and vanpool staging areas, and appropriate transit routes, is a wide-area map. For most employers, it will contain most of the Bay Area. For Santa Clara County employers, this display map should also contain Santa Cruz County. For those using zip codes for residence zones, a Bay Area Zip Code Map is available. MTC has printed a zip code map with major streets, highways, and BART to use for residence mapping (see below).

The other type of map is the set of large-scale, small-area maps needed to help locate addresses precisely enough to plan carpools or help employees to use public transit.

Display Maps

San Francisco Bay Area Wall Map (Includes Santa Cruz County)

Size:	7' X 4'
Scale:	1:125,000
Cost:	\$3.50 per reproduction
Detail:	Contains county boundaries, highways, natural features and cultural features.
Availability:	Metropolitan Transportation Commission Graphics Department Claremont Hotel Berkeley, CA 94705 (415) 849-3223

Zip Code Maps

Bay Area Zip Codes

Size: 2½' x 3½'
Scale: 1:5,000
Cost: \$2.50 per reproduction (\$4 if mailed)
Detail: Contains county boundaries and zip code boundaries
Availability: Metropolitan Transportation Commission
Graphics Department
Claremont Hotel
Berkeley, CA 94705
(415) 849-3223

Bay Area Zip Codes with major streets, highways, and BART (same size, scale, cost, and availability as above).

Large-Scale Maps

These maps, showing city blocks, come in two formats: folding maps and books of map segments. Each type has its uses and its drawbacks. The following is a list of the maps that are available:

Folding Maps: Triple-A Series

Size: About 20" x 28"
Scale: Varies around an average of 1:2700
Cost: Free through membership only
Colors: Blue, green, yellow, red
Detail: Full for built-up areas
Availability: Local offices of the California State
Automobile Association

AAA Maps

1. Alameda County-Contra Costa County
2. Antioch, Pittsburg and vicinity
3. Bay and River Area
4. Benicia, Dixon, Hercules, Port Costa, Crockett, Rodeo and vicinity
5. Daly City, South San Francisco, San Bruno, Millbrea, Brisbane, Colma and Pacifica
6. Fairfield, Suisun City
7. Fremont, Newark, Union City, and vicinity
8. Greater San Jose northern area, north of Stevens Creek Road, including Los Altos, Milpitas, Mountain View, Santa Clara, Santa Clara, Sunnyvale and portions of Cupertino and San Jose
9. Greater San Jose southern area, South of Stevens Creek Road including Campbell, Los Gatos Monte Sereno, Saratoga, and portions of Cupertino and San Jose
10. Gilroy City
11. Hayward, San Leandro, San Lorenzo, Castro Valley
12. Livermore, Pleasanton, and vicinity
13. Marin County
14. Martinez, Concord, Pleasant Hill, Port Chicago, Pacheco and vicinity
15. North Bay counties
16. Napa and vicinity
17. North Bay counties
18. Novato and vicinity
19. Oakland, Berkeley, Alameda, Albany, Piedmont, Emeryville
20. Palo Alto, and vicinity including Atherton, La Honda, Menlo Park, etc.
21. Peninsula Points, Santa Cruz, Monterey, and adjacent areas
22. Petaluma, Rohnert Park, Cotati, and vicinity
23. Pleasanton
24. Richmond, Rohnert Park, Cotati, and vicinity
25. San Francisco
26. San Francisco Tour Map

27. San Mateo, Burlingame, Belmont, Hillsborough, Half Moon Bay, Foster City, Miramar, Montara, Moss Beach, Princeton, El Granada
28. San Mateo County
29. San Rafael, San Anselmo, Corte Madera, Fairfax, Ross, etc.
30. Santa Clara County and Santa Cruz county
31. Solano and Yolo Counties
32. Sonoma and Napa Counties
33. Sonoma City
34. Vacaville and vicinity
35. Vallejo and vicinity
36. Walnut Creek, Pleasant Hill, Lafayette, Moraga, Alamo, Danville, Rheem Valley

Folding Maps: Regal (for Santa Clara County only)

Size: 35" X 45"
 Scale: 1:3140
 Cost: \$1.75
 Colors: Blue, yellow, green
 Availability: Regal Map Company
 63 Keyes
 San Jose, CA 95112

Book Maps: Thomas Bros. Street Atlas, Regular Edition

Size: 8" 10", Approximately 400 pages per book
 Scale: Varies from 1:1000 to 1:2640
 Cost: Varies from \$6.00 to \$14.95 per book
 Colors: Orange, gray, brown
 Availability: Thomas Bros. Maps
 550 Jackson Street
 San Francisco, CA 94133

Individual Thomas Bros. Books

<u>Product</u>	Next		<u>Scale</u>
	<u>Current</u>	<u>Issue</u>	
	<u>Price</u>	<u>Price</u>	
Alameda County with Cross Street Index.	\$ 7.00	\$ 7.95	2200'
Alameda-Contra Costa Counties Combination	13.00	14.95	2200
Alameda-Santa Clara Counties.	12.00	13.95	2200
Contra Cost County.	7.00	7.95	2200
Golden Gate Counties			
Marin-San Francisco County (with Cross Street Index)	24.00		
Marin County	7.00		1750
San Francisco County (with Cross Street Index) . . .	7.00		1100
San Mateo County	7.00		2200
Santa Clara County	7.00		2200
Santa Clara-San Mateo Counties	13.00		2200
Sonoma County	7.00		2640

TRANSPORTATION STUDY

_____ is seeking ways to make employee transportation more convenient and less costly.
Please fill out this form and return it to _____. Thank you.

Last Name

First Name

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

City

Home Zip Code

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

How far is your own way trip to work? _____ miles

If you currently drive alone, would you consider changing to any of the following means of commuting? (check as many as apply)

How do you normally get to work? (check one)

- | | |
|---|---|
| 1. ☐ Driving alone | 7. ☐ Club bus |
| 2. ☐ Carpool | 8. ☐ Bicycle |
| 3. ☐ Bus | 9. ☐ Walk |
| 4. ☐ BART | 10. ☐ Motorcycle |
| 5. ☐ Drop off | 11. ☐ Other |
| 6. ☐ Vanpool | |

- | | |
|--|--|
| 1. ☐ Carpool | 4. ☐ Shuttle bus to transit |
| 2. ☐ Vanpool | 5. ☐ Bicycle or motorcycle |
| 3. ☐ Public Transit | 6. ☐ Would not use any of above |

TRANSPORTATION SURVEY

TRAVEL QUESTIONS

1. WHAT CITY OR TOWN DO YOU LIVE IN? _____.
2. WHAT STREET DO YOU LIVE ON? _____.
3. WHAT IS THE NEAREST CROSS STREET? _____.
4. WHAT IS THE DISTANCE FROM HOME TO WORK? _____ MILES, ONE WAY.
5. HOW DO YOU USUALLY GET TO AND FROM WORK? PLEASE CHECK ONLY ONE.

CAR ☐ DRIVE ALONE
☐ SHARE A RIDE (EITHER AS A PASSENGER OR DRIVER)

☐ DIRECT ROUTE WITH NO TRANSFER
BUS ☐ I DRIVE TO WHERE I CATCH THE BUS
☐ I TRANSFER FROM ONE BUS TO ANOTHER

BART ☐ I WALK TO THE STATION
OR ☐ I DRIVE TO THE STATION; DROPPED OFF BY CAR
SP ☐ I TAKE THE BUS TO THE STATION

WALK ☐

BICYCLE ☐

OTHER ☐ PLEASE SPECIFY: _____.

6. IF YOU SHARE A RIDE TO WORK, HOW MANY PEOPLE, BESIDES YOURSELF, ARE IN YOUR CAR POOL OR VAN POOL?

☐ 1 OTHER PERSON ☐ 2 OTHER PEOPLE ☐ _____ OTHER PEOPLE

- 6A. ARE ANY OF THESE A MEMBER OF YOUR HOUSEHOLD?

☐ Yes ☐ No

7. WHAT IS YOUR BIGGEST PROBLEM OR COMPLAINT ABOUT GETTING TO AND FROM WORK?

SCHEDULING QUESTIONS

8. WHAT TIME DID YOU LEAVE HOME TO COME TO WORK TODAY? _____

9. WHAT TIME WAS IT WHEN YOU ARRIVED? _____

10. WHAT TIME WAS IT WHEN YOU OFFICIALLY STARTED WORK? _____

11. ARE THE WORKING HOURS OF YOUR UNIT FIXED OR FLEXIBLE?

☐ FIXED, I HAVE TO REPORT AT THE SAME TIME EVERY DAY

☐ PARTIALLY FLEXIBLE, I CAN VARY MY ARRIVAL TIME BUT ONLY WITH APPROVAL IN ADVANCE

☐ FULLY FLEXIBLE, I CAN VARY MY ARRIVAL TIMES FROM DAY TO DAY.

☐ OTHER: _____

THE REMAINING QUESTIONS ARE FOR PEOPLE WHO USUALLY DRIVE TO WORK ALONE

12. CONSIDERING WHERE YOU LIVE AND YOUR SCHEDULE, WOULD IT BE CONVENIENT FOR YOU TO USE TRANSIT MORE OFTEN?

☐ YES

☐ NO

☐ I DON'T KNOW

13. WHICH OF THE FOLLOWING WOULD MAKE TRANSIT MORE CONVENIENT OR ATTRACTIVE TO YOU? (PLEASE CHECK ONLY THOSE THAT WOULD MAKE A REAL DIFFERENCE.)

☐ IF THE COMPANY SOLD MONTHLY TRANSIT PASSES AT A DISCOUNT
☐ OR

☐ IF THE COMPANY DISTRIBUTED TRANSIT PASSES FOR SALE

☐ IF THE BUS CAME CLOSER TO MY HOUSE

☐ IF THE BUS CAME MORE FREQUENTLY

☐ IF THE BUS CAME MORE DIRECTLY OR HAD FEWER INTERMEDIATE
STOPS

☐ OTHER: _____

14. WOULD IT BE CONVENIENT TO JOIN A CAR POOL ON A REGULAR BASIS?

☐ Yes ☐ No

15. WHICH OF THE FOLLOWING WOULD MAKE CAR POOLING MORE CONVENIENT OR ATTRACTIVE FOR YOU. (PLEASE CHECK ONLY THOSE YOU FEEL WOULD MAKE A REAL DIFFERENCE.)

☐ IF I COULD LOCATE A FELLOW EMPLOYEE WHO LIVES CLOSE BY

☐ IF THE COMPANY RESERVED PARKING SPACES FOR CAR POOLS CLOSE
TO MY WORK UNIT

☐ IF I COULD CHANGE MY WORKING HOURS SOMEWHAT

☐ IF I COULD POOL REGULARLY, BUT ONLY TWO OR THREE DAYS A WEEK

☐ OTHER: _____

16. IF YOU WOULD LIKE ASSISTANCE JOINING A CAR POOL OR FINDING THE MOST CONVENIENT BUS ROUTE, PLEASE GIVE US YOUR NAME AND WORK TELEPHONE--AND WE'LL BE BACK IN TOUCH.

NAME: _____ WORK PHONE: _____

WORK UNIT: _____

SANTA CLARA COUNTY MANUFACTURING GROUP AND COUNTY TRANSIT DISTRICT TRANSIT QUESTIONNAIRE

Official Use

--	--	--	--	--

(6-10)

HOME INFORMATION

1. City Zip Code

(11-26) (27-31)

2. Nearest Major Intersection &

(32-45) (46-59)

WORK INFORMATION

3. Company Name

(60-86)

4. Street Number Street Name Bldg. Number

(87-91) (92-107) (108-111)

5. City Zip Code

(112-127) (128-132)

6. Work Hours Starting Time : AM PM Ending Time : AM PM

(133-137) (138-139) (140-144) (145-146)

7. How much of an adjustment to your working hours could you arrange or accept? (Check one)

(147) ☐ No Adjustment ☐ 15 minutes ☐ 30 minutes ☐ 60 minutes ☐ 90 minutes

1 2 3 4 5

COMMUTE INFORMATION

8. I normally get to work by: (Check (✓) one)

Drive Alone	Car Pool	County Bus	S.P.	Walk	Bike	Other
☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

9. How long does each one-way trip take?

Mins (AM)	Mins (PM)
:	:
(149-150)	(151-152)

10. In your opinion, what would be the best reason for commuting by transit or ridesharing? (Check only one)

(153)

1 ☐ Way to save money 2 ☐ Way to avoid the stress of commuting 3 ☐ Eliminate need for second car	4 ☐ Way to reduce fuel use 5 ☐ Other _____
--	--

11. What is the maximum ONE-WAY fare you could accept for EXPRESS COMMUTER bus service? (Check one)

(154)

\$0.75	\$1.00	\$1.25	\$1.50	\$1.75
☐	☐	☐	☐	☐
1	2	3	4	5

12. What is your best estimate of the number of gallons of gasoline you use per week for commuting? (Check one)

(155)

1 ☐ 1-5 gallons 2 ☐ 6-10 gallons	3 ☐ 11-15 gallons 4 ☐ 16-20 gallons	5 ☐ 21-25 gallons 6 ☐ 26 or more gallons
--	---	--

PLEASE CONTINUE ON BACK OF FORM

1		Today's Price	3		\$2.00	5		\$4.00	7		I will pay any price
2		\$1.50	4		\$3.00	6		\$5.00	8		Don't know

14.
(157)

1 ☐ Yes 2 ☐ No 3 ☐ Don't know

(158) ☐ County Transit regular bus

(163) ☐ Southern Pacific Train

(159) Express bus

(164) ☐ Southern Pacific Train with connecting shuttle

(160) ☐ Express bus
with connecting shuttle

(165) ☐ Walk, run, bicycle, moped

(161) ☐ Car Pool

(166) ☐ Move closer to job

(162) Van Pool

(167) ☐ Get job closer to home

16.
(168)

1	☐	Yes
2	☐	No, but I support the special lanes and hope others would switch from driving alone
3	☐	No, and I would rather see the highways expanded for all vehicles.
4	☐	No opinion.

17.
(169)

1	☐	I've tried it and was dissatisfied, because _____
2	☐	I frequently have to work overtime.
3	☐	Need car for errands during lunch.
4	☐	Need car for errands to and from work.
5	☐	Uncomfortable with someone else driving
6	☐	I use my car at work.
7	☐	Don't want to ride with a group.
8	☐	Don't know where to get information.
9	☐	Pooling might be too expensive
10	☐	Other _____

18.
(170-
171)

[illegible]



RIDESHARING CREDIT

(Attach this schedule to your tax return)

Or for Fiscal Year Begun _____, 19____ and Ended _____, 19____

Indicate origin of credit:

☐ INDIVIDUAL ☐ CORPORATION ☐ PARTNERSHIP ☐ Other (describe) _____

Social Security No.: _____ Corporation No.: _____ Federal Employers ID No.: _____

NAME (ORGANIZATION ORIGINATING THIS CREDIT) _____

ADDRESS (IF DIFFERENT THAN ON THE RETURN) _____

CITY OR TOWN, STATE, AND ZIP CODE _____

GENERAL INFORMATION

Employers are eligible for a 20 percent tax credit for costs incurred for vehicles acquired after September 25, 1981, and on or before December 31, 1986, for the purchase, lease or charter of shuttle busses, commuter busses or vans, or company motor pool vehicles used solely for an employer-sponsored ridesharing incentive program, for employees, conducted principally in this state. The credit does not apply to the costs of insurance, maintenance, fuel, driver's salary, or other operating expenses; or to the cost of purchasing, leasing or chartering of vehicles which would otherwise be required as part of the employer's business activities in the absence of an employer-sponsored ridesharing incentive program; or for the purchase, lease or charter of a commercial vehicle used for the transportation of individuals for hire, compensation or profit; or for the transportation of property. The cost basis for depreciation of vehicles purchased for this program must be reduced by the amount of the credit. The credit is nonrefundable, but any unused credit may be carried forward to succeeding years.

In addition to the credit, costs listed on page 3 of this form are deductible for income years beginning on or after January 1, 1981, and ending on or before December 31, 1986.

COMPLETE SCHEDULES ON BACK AND SHOW TOTALS BELOW.

1. Cost for PURCHASE of employee ridesharing vehicles \$ _____
2. Cost for LEASING or CHARTERING employee ridesharing vehicles \$ _____
3. Total of lines 1 and 2 \$ _____
4. Allowable credit (20% of line 3) \$ _____
Enter credit on Form 540/540NR, line 72; Form 541, line 29, Form 100, page 2, Schedule A; or Form 109, page 2.
5. Allowable Deductions — Enter deductions on Schedule C (540), line 31; Schedule F (540), line 53; Form 541, line 16; Form 100, line 11a; or Form 109, page 2, line 25.

CARRYOVER OF RIDESHARING CREDIT

- | | |
|---|--|
| 1. Current year credit: _____ | |
| 2. Less amount claimed on current tax return: _____ | |
| 3. Carryover to future years: _____ | |

See page 3 for "ALLOWABLE DEDUCTIONS" and "DEFINITIONS"

RIDESHARING INCENTIVE PLANS

Costs Eligible for Credit **(See Definitions)**

Number of Vehicles

Costs

	<u>Purchased</u>	<u>Leased or Chartered</u>	<u>Purchased</u>	<u>Leased or Chartered</u>
Company Shuttle Busses	_____	_____	_____	_____
Company Commuter Busses or Vans _____	_____	_____	_____	_____
Company Motor Pool Vehicles _____	_____	_____	_____	_____
Totals	=====	=====	=====	=====

NOTE: AT SOME TIME IN THE FUTURE, EMPLOYERS AND EMPLOYEES INVOLVED IN THE PROGRAMS MAY BE SURVEYED TO DETERMINE ENERGY SAVINGS.

Allowable Business Deductions **(See Definitions)**

Costs

Subsidizing employees commuting in third-party van pools	_____
Subsidizing employees commuting in private commuter busses	_____
Subsidizing monthly transit passes for employees	_____
Subsidizing monthly transit passes for employees' student dependents.	_____
Subsidizing employees commuting in subscription taxi pools	_____
Offering cash equivalent to employees not requiring employee parking	_____
Providing free or preferential parking to carpools and van pools	_____
Depreciation on facility improvements directly related to employees commuting to work:	
Construction of bus shelters	_____
Bicycle related installations — parking racks	_____
locker rooms	_____
showers	_____
Parking lot modifications for carpools, van pools and bus pools	_____
Other (specify) _____	_____
_____	_____
_____	_____
Depreciation on Ridesharing vehicles	_____
Totals	=====

ALLOWABLE DEDUCTIONS

In addition to the credit, employers are also allowed deductions for expenses incurred in each of the following activities:

- (1) Subsidizing employees commuting in third-party vanpools.
- (2) Subsidizing employees commuting in private commuter busses.
- (3) Subsidizing monthly transit passes for employees or for use by the employee's dependents, except that no deduction is allowed for transit passes issued for the use of elementary and secondary school students.
- (4) Subsidizing employees commuting in subscription taxipools.
- (5) Offering a cash equivalent to employees who do not require parking, but only if free parking is provided for employees.
- (6) Providing free or preferential parking to carpools and vanpools.
- (7) Making facility improvements to encourage employees, commuting from their homes, to participate in ridesharing arrangements, to use bicycles, or to walk. These facility improvements may include, but are not limited to, any of the following: the construction of bus shelters; the installation of bicycle racks and other bicycle-related facilities, such as showers and locker rooms; and parking lot modifications to provide carpools, vanpools, or buspools with preferential treatment. The cost of these facility improvements may be depreciated over a 36-month period.
- (8) Providing company commuter van or bus service to employees and to others for commuting from their homes, but not for transportation required as a part of business activities, except as stated below. The capital costs of providing this service is not deductible.
- (9) Expenses, other than the costs of capital assets, of providing transportation services to employees required for the employer's business, which would otherwise be provided by the employees without reimbursement.

DEFINITIONS

Employer-sponsored ridesharing incentive program — A program undertaken by an employer either alone or in cooperation with other employers to encourage and/or provide fiscal or other incentives to employees to make the home-to-work commute trip by other than the single-occupant motor vehicle.

Employer — A taxpayer who is —

- An individual, fiduciary, partnership or corporation for whom services are performed by employees.
- A private educational institution which enrolls students at higher than the secondary level.

Employee —

- An individual who performs service for an employer for more than eight hours per week for pay.
- A commuting student who is a registered full-time student at a college, university or other postsecondary educational institution, who lives off the campus, and who travels between his or her residence and the campus on a regular, though not necessarily daily, basis.

Company shuttle bus — A highway vehicle, acquired after September 25, 1981, that —

- Has a seating capacity of at least eight adults, not including the driver.
- At least 80 percent of the mileage can reasonably be expected to be for any of the following purposes:
 1. Transporting employees on a scheduled-route basis.
 2. Interfacing with public transportation facilities.
 3. Transporting employees on a demand-response basis.

Company commuter bus or van — A highway vehicle acquired after September 25, 1981, that —

- Has a seating capacity of at least eight adults, not including the driver.
- At least 50 percent of the mileage can reasonably be expected to be used for the purpose of transporting employees.

Company motor pool vehicle — A highway vehicle acquired after September 25, 1981, that —

- Is an automobile with a gross vehicle weight of 6,000 pounds or less.
- Meets or exceeds certain fuel efficiency standards pursuant to the provisions of Title II of Public Law 95-618.
- Is made available to all employees on a nondiscriminatory basis in the normal course of the taxpayer's business.

Third-party vanpool — A vanpool that is administered and operated by an outside organization, including a government agency, which makes vehicles and other equipment and services available for use by employers and their employees.

Vanpool — Eight or more persons commuting on a daily basis to and from work by means of a vehicle with a seating arrangement designed to carry 8 to 15 adult passengers.

Monthly transit pass — Any bulk purchase of transit rides that entitles the purchaser to 40 or more rides per month, whether at a discount rate or the base fare rate.

Transit — Transportation service for use by the general public that utilizes buses, railcars, or ferries with a seating capacity of 16 or more persons.

Subscription taxipool — A type of service in which employers or groups of employees contract with a public or private taxi operator to provide daily commuter service for a group of preassembled subscribers on a prepaid or daily-fare basis, following a relatively fixed route and schedule tailored to meet the needs of the subscribers.

Ridesharing arrangement — Transportation of individuals in a motor vehicle where the transportation is incidental to another purpose of the driver (i.e., normally the driver would have made the trip without the rider(s)).

Carpool — Two or more individuals commuting on a daily basis to and from work by means of a vehicle designed to carry less than eight adult passengers.

Buspool — Sixteen or more individuals commuting on a daily basis to and from work by means of a vehicle designed to carry more than 15 adult passengers.

AN AMBITIOUS CARPOOL MARKETING PLAN FOR THE FULLY-COMMITTED ORGANIZATION

Marketing is an art on its way to becoming a science. This appendix applies advanced marketing principles to the promotion of carpooling. The same principles can be applied to vanpools, club buses, and cycling.

The first rule of marketing is to appeal to people in the language of their concerns. This may require a different message for different audiences. For instances:

EMPLOYEES may think of carpooling as a way to save money and hassle getting to work. Only a few will see it in larger social terms such as saving energy.

MANAGEMENT may think of carpooling as a political strategy to improve government's response to your organization's growth and expansion plans, or as an asset in recruiting and retaining qualified personnel.

LOCAL TRANSPORTATION PLANNERS may think of carpooling as part of a master plan for energy conservation, pollution reduction, and transportation system efficiency.

Your program will be more successful if you speak to each audience in the language of their concerns.

A carpool promotion program involves both a product and a service. The product is a ride to work; the service is the assistance you provide in pairing and introducing people. You will need to market both the product and the service.

MARKETING THE PRODUCT. There are four general approaches to marketing:

1. Emphasizing the product's strong points;
2. Neutralizing objections to the product;
3. Improving the product; and
4. Reducing the cost the customer pays.

1. Emphasizing Strong Points

Some carpool promotion programs have emphasized the social merits of carpooling--energy conservation, traffic reduction, pollution reduction. These positives are icing on the cake. The central value of

carpooling to an employee is a ride to work that saves money on gas, car repairs, and in some cases, parking fees. Added up, the annual cost of driving alone can be staggering. It may not be exaggerating to say that employees can join a carpool and earn a "free" trip to Hawaii. The money saved by carpooling might just add up to the airline fare to Hawaii. The money to be saved should be the centerpiece of your marketing campaign. You can compute the amount based on average trip lengths for your company's employees.

The wear and tear of driving alone is another point to emphasize. People get tired of bumper-to-bumper traffic. With suitable graphics and illustrations you can strike a responsive chord with the tired-of-traffic theme. Thus, your advertising campaign should be a mirror of the experiences and expectations of the people you are trying to persuade to pool.

2. Neutralizing Objections

Some people have negative perceptions of carpooling. Surveys have turned up objections like these:

- o "Too confining."
- o "When I finish work I like to be on my own."
- o "It would be a hassle waiting for somebody else."
- o "I'm not much of a talker in the morning."

It may be possible to neutralize these perceptions that carpooling is too confining and involves too much waiting and too much talk. Testimonials from people who do pool can be used to refute these perceptions if they are presented subtly. Consider these first-person testimonials. They are presented question and answer style as in a newsletter interview:

Q. Is your carpool talkative?

A. We all talk on the way back home. But we're quiet in the morning. We respect each others' privacy.

Q. What happens when someone is late?

A. We wait for 10 minutes. But that almost never happens. We all make it a point to be ready on time. You just owe that to each other.

Q. What about doing errands on the way home?

A. I carpool four days a week. The other day I drive and do errands on the way home. I save money four days a week and spend it the fifth day!

People who live close by or work highly irregular hours probably can't be persuaded to pool. Ridesharing is the wrong commute alternative for these employees.

3. Improving the Product

A preferential parking space is a way to significantly improve the value of carpool membership. Public agencies are introducing preferential bridge tolls and so-called "priority lanes" on freeways to improve the performance of carpools relative to driving alone.

You can invent other product improvements: A teen club or church group might be invited to hold a special car wash for carpool vehicles with the company paying. A company contribution to the United Way might be pegged on the basis of 1¢ for every mile not driven--a variant to the "walkathon." The idea is to increase the perceived value of carpool membership.

4. Reducing the Product's Price

It costs time to carpool, particularly if riding together involves waiting for another employee with a different shift assignment. Last minute meetings and the typing of last minute correspondence can also impose delays on other carpool members. Waiting time and unexpected delays are a deterrent to carpooling and a price that is perceived as very high.

It is possible to minimize waiting time. Building scheduling flexibility into shift assignments is one strategy. And the development of a courtesy "ethic" that discourages last minute meetings and correspondence is another strategy.

Thus, marketing carpools may require a memo to managers reminding them that last minute assignments can disrupt carpool schedules. Better anticipation, scheduling and communication within work groups can reduce this cost of carpooling.

MARKETING THE SERVICE. Pairing people in pools is a service that can be delivered in many different ways, for example:

- o Computer match lists.
- o Free rides-wanted ads in the company newsletter.
- o Bulletin board space for "Rides wanted."

- o In-person introductions arranged over coffee and doughnuts.
- o A telephone call introducing a new employee to a carpool that is seeking another member.

The services below are listed in order of increasing effort and effectiveness:

- o Passive - Providing a ride-board,
- o Reactive - Providing a matchlist on request,
- o Direct solicitation - Selling new employees before a driving habit is established,
- o Person-to-person follow through - calling back to insure that individual employees have been able to find a pool. Introducing employees from target neighborhoods in person.

Many ridesharing programs begin with a saturation mail campaign offering employees the chance to sign up for a list of potential carpool mates. The response to such campaigns is usually limited, but it can provide a list of prospects for future matching purposes. And it may stimulate the word-of-mouth and friendship networks that are so important in the formation of carpools.

The most successful marketing programs have both continuous visibility and a personal touch. Continuous visibility can be achieved by piggybacking every information medium in your organization--bulletin boards, newsletters, paychecks, even the walls of bathroom stalls. Posters, memos and news items should remind employees they can call a specified individual for personal help finding a ride to work. The personal touch involves individual assistance as employees seek carpool placement one by one. Finding a ride for individual employees may require more than a computer search and a match list. The coordinator may have to keep track of bulletin boards, make phone calls, or review names culled from the company newsletter. Personalizing the coordinator's role creates a service much like that which real estate brokers provide. Among realtors, it is reputation and referrals that add up to a successful career.

A personal touch is important for another reason. Reluctance to ride with a stranger whose habits and dependability are unknown is a prime deterrent to carpooling. Playing go-between is an important way to break down that reluctance. Recruiting commute coordinators within work groups is a way to bring your program even closer to its customers.

The personal touch and a continuous visibility media campaign are entirely compatible. The media campaign brings in customers one by one. The personal touch is often what it takes to get them together.

The emphasis on personalized service for individual employees can be extended to the promotion of transit use as well. One Bay Area transit operator provides commuters with individualized itineraries that take the uncertainty out of using the bus. AC Transit offers a written itinerary which includes the stop nearest home, the time to catch the bus in order to reach work on time, and the bus stop nearest work. This is a level of detail not available from most transit maps and schedules. Thus, a customized bus itinerary for new employees is another personalized service coordinators can consider.

Personalized service is the trademark of the most successful carpool and transit marketing programs; but it is not the norm. Most programs provide information aids (match lists, transit maps, and transit schedules) without person-to-person follow-up. Since they are impersonal and sometimes intimidating, these information aids produce only limited results--unless their distribution coincides with an external event such as the petroleum embargo of 1974 or the gas shortage of 1979.

Personalized placement is more costly but often more cost-effective. Consider the results if a coordinator for a company of 2000 employees could succeed in assisting just one employee per day to shift from driving alone to carpooling, transit use, or cycling. If the company is typical of the Bay Area norm, 70 percent or 1400 of its employees currently drive to work alone. One less car driven alone each working day would accumulate to an 18 percent reduction in solo driving after one year. The return would be well worth the personal effort invested.

We can sum up by emphasizing that persistent one-to-one contact and personalized service can be more effective over the long run than a one-shot, saturation approach to the marketing of commute alternatives.

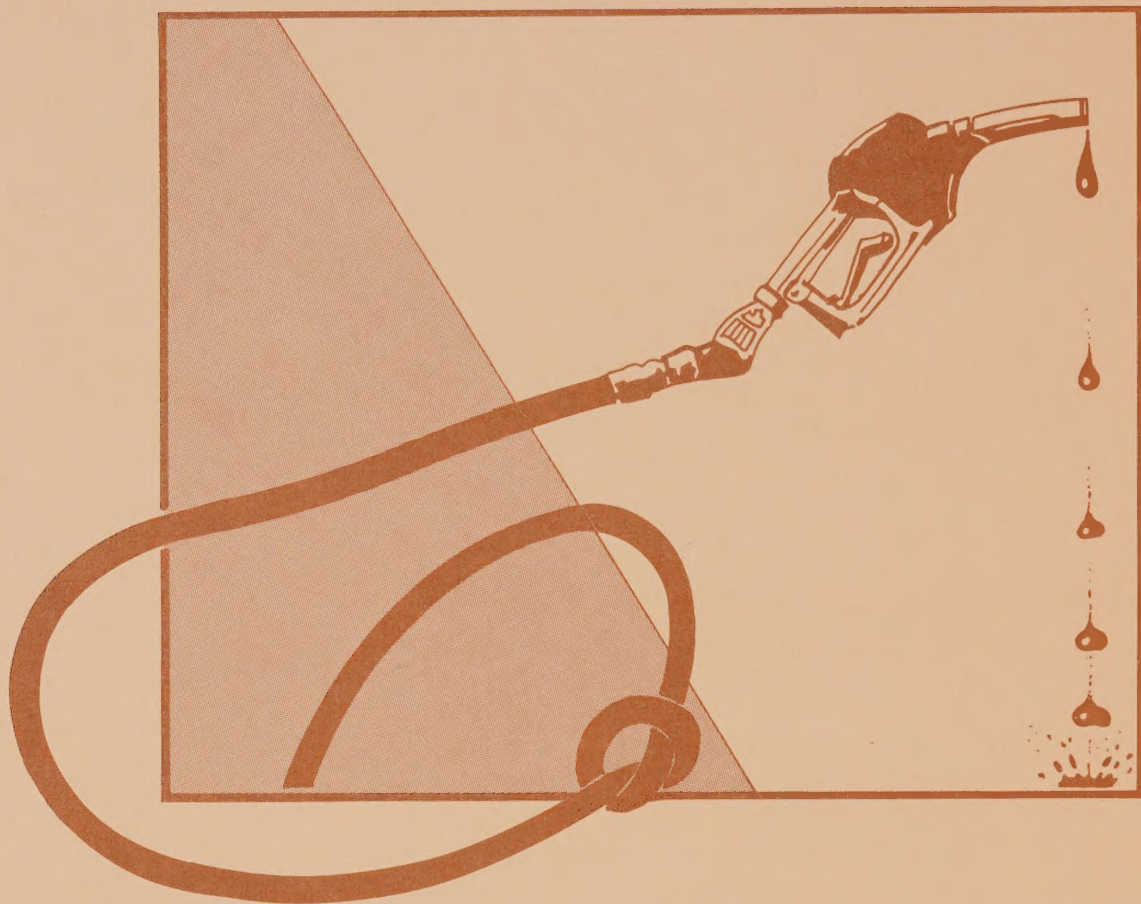
Thus the marketing program should ideally be based on:

- o Message content that speaks to customers in the language of their experience and needs.
- o Continuous visibility maintained by piggybacking every information channel in your organization.
- o The personal touch of a personalized service.

TARGETED OUTREACH. Sophisticated product marketing campaigns target their customers. The theory is simple: Resources will deliver the most return if they are focused in prime submarkets. In practice, this means that more stereos are sold by advertizing in hi fi magazines than in general circulation newspapers. Can the hi fi experience be applied to carpool promotion?

If the coordinator is reaching out to employees person-to-person, it becomes crucial to spend personal time where it will produce the greatest returns. Analysis can be helpful here. The coordinator can use surveys to determine which employee neighborhoods are generating the largest number of carpools. The idea is to isolate and identify communities where the ridesharing habit is beginning to catch on, and reinforce that trend with targeted contact. A random approach to in-person callbacks and introductions can be very time consuming. A targeted approach that focuses on 1) new employees; 2) employees transferred from one unit to another; 3) employees who have moved their place of residence; and 4) employees who live in neighborhoods where there is a concentration of company employees, can make personalized outreach very effective.

In marketing jargon, the process is called "market segmentation;" in plain english, the process involves spending your time with prime prospects, rather than resistant ones.



A transportation emergency such as a fuel shortage will place additional demands on a coordinators' resources. It is a good idea to plan ahead.

CHAPTER 7

CONTINGENCY PLANS

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SUMMARY AND DEFINITION

One of the reasons many employers have become involved in commute alternatives programs is to prepare themselves for transportation emergencies, especially petroleum shortages. An oil shortage affects business in two ways: (1) the operations of many companies may depend on a readily available, reasonably-priced fuel supply; and (2) businesses are also dependent on employees being able to get to work and be at work on time. Developing an ongoing commute alternatives program, administered by a transportation coordinator, will help a company prepare for possible emergencies. A transportation emergency, however, will present additional demands on a coordinator's resources, and it is a good idea to plan ahead. Many companies may wish to prepare a special plan that addresses the problem of fuel shortages. Some companies that do not have a commute alternatives program or a designated transportation coordinator may still wish to develop a program for emergencies.

Types of Contingencies

There are five categories of transportation emergencies:

- Fuel shortages
- Transit strikes
- Localized disruptions in the transportation system
- Air pollution episodes
- Personal transportation emergencies (where an employee's normal mode of transportation, such as a car, is not available)

Although this chapter focuses on fuel shortages, many of the planning approaches and strategies will apply to other contingencies as well. The chapter will conclude with a brief discussion addressing each of the other types of emergencies.

Fuel Shortages

In the past decade, the United States has experienced two serious petroleum shortages due to disruptions in Middle East oil supplies — in 1973-74 and in early 1979. There is a strong likelihood that such a shortage will occur again. A shortage may be mild and short-lived (due perhaps to local refinery disruptions or distribution problems) or it may be severe and of longer duration. The probable cause of a major fuel shortage would be an embargo or disruption of imports from the OPEC countries. Since gasoline prices have been "decontrolled," a shortage would most likely initially manifest itself by a sudden steep increase in price. This price increase would probably mitigate the severity of gas station lines experienced in previous shortages, but will create even greater demands on transit and other ridesharing modes.

In any fuel shortage, all commuters are affected. They are affected by the sharply increased costs of commuting, by time spent in gas lines, and, perhaps, by rationing or other restrictions which do not allow them to continue to drive to work by themselves every day.

Types of Response Plans

The company energy planner or transportation coordinator may work with local and regional government agencies to develop an areawide contingency plan or may work on a contingency plan for the company or a joint plan with other companies in the area.

A company fuel shortage contingency plan should address two areas: fuel used by the organization in its operations and employee commute needs.

EXAMPLES OF COMPANY PLANS

Lockheed Missiles and Space Co., Sunnyvale

Lockheed developed an emergency plan to get people to work during the 1973-74 energy crisis. A four digit number was added to the payroll file of each employee to identify the residential zone in which the employee lived. Employees could be matched with other employees in their zone in one to two hours using a computer. Two or three people in each grid zone were drafted as group leaders to get their neighbors into carpools. The contingency plan also included a system for transporting employees around the plant and a Flexible Integrating Distribution System (FIDS) for more efficient assignment of company pool vehicles for joint use by employees for business trips. The plan was quickly implemented and proved successful in coping with the shortage. After the crisis was over, the grid matching system was retained as the backbone of the ongoing commute alternatives program.

General Electric Co., San Jose

The General Electric contingency plan is based on having a system in place for employees to match themselves in carpools with other employees whenever they need to. A map overlaid with a grid system is set up in a prominent place in each of the company's 11 sites. The display board includes a file box and simple matching forms. An employee who wants to carpool files a form under the coordinates of his/her grid. Employees can match themselves by seeking other employees in the same or neighboring grids. This type of system takes relatively little effort to maintain. General Electric also runs a regular shuttle bus between their sites (all within a two to three mile radius) and to nearby transit stops.

Burt Epstein, who set up the General Electric system, estimates that 800-900 carpools were formed during the last fuel crisis. The number fell to 200 six months after the crisis was over. Mr. Epstein can supply detailed plans for other companies wishing to set up a similar system. His phone number is included in the Contacts list and additional information on the program can be found in the Appendix.

ROLM Corporation, Santa Clara

Several companies in the Bay Area began developing employee commute contingency plans after the 1979 gasoline shortage. These plans have not yet had a chance to be tested, but can serve as examples to other organizations. One such company is ROLM.

The ROLM plan originally called for monitoring fuel availability and government regulations to ensure continued fuel allocations for company vehicles and priority allocations for employee ridesharing vehicles. The coordinator explored the possibility of purchasing on-site fuel storage space and applying for federal allocations of gasoline for company vehicles and registered participants in the ridesharing program. (The federal allocation system on which the plan is based is no longer in effect; this indicates the importance of monitoring and updating activities in contingency planning.) Other elements of the ROLM contingency plan are: process data from personnel files — using

the county's geocoding and matching program — to develop employee match lists; sponsor daily cafeteria sessions to assist in carpool formation; investigate the availability of paratransit vans for employee transportation; fill up space in established vanpools; investigate the use of school buses and explore joint use with other nearby companies; and provide bus information and schedules for those living along the bus lines serving the site.

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AREAWIDE CONTINGENCY PLANS

Companies that get involved in energy contingency planning should be aware of federal, state and local government contingency plans and policies. They should also keep abreast of the contingency plans of the ridesharing agencies and transit operators in their area. Company plans can be an effective part of a cooperative areawide energy contingency plan. This section provides information on public contingency plans.

BACKGROUND

Public interest in contingency planning was sparked by the gasoline shortage in 1973-74 and again by the shortage in the spring of 1979. These shortages led to several federal actions. The change in federal administrations in 1981 resulted in uncertainty as to the status of some of these programs.

Agreement on an International Energy Program

In 1974, 20 nations agreed to allocate equitably the supply of world crude oil among the participants during a severe supply interruption. The agreement was expected to be implemented by the voluntary participation of international oil companies. In 1979 the United States Department of Energy developed a standby program to implement the international allocation of oil by issuance of supply orders to U.S. oil companies if the voluntary response is inadequate.

Emergency Energy Conservation Act of 1979 (EECA)

This Act, passed in November 1979 under President Carter (Public Law 96102), had several elements. It set up procedures and a schedule for developing a gasoline rationing plan; defined a "severe energy supply interruption" warranting implementation of a rationing plan as being a continuing 20 percent shortfall in supplies; gave authority to the president to establish energy conservation targets for the nation and for each state when necessitated by an imminent shortage; required states to develop emergency energy conservation plans designed to achieve the targets; and required the federal government to adopt a standby energy conservation plan that would go into effect in states which do not have a plan or are not achieving their targets.

Standby Federal Emergency Energy Conservation Plan

In February of 1980 the Department of Energy published a standby energy conservation plan which was required under the Emergency Energy Conservation Act of 1979. The plan included an employer-based commute measure. In early 1981, the federal government withdrew most of the standby measures including the alternative commute strategies. It was felt that deregulation of petroleum would allow the market to adjust to future energy supply interruptions.

President Carter's 20/20 Plan

In April of 1980, President Carter asked major employers to work toward a 20 percent participation of employees in ridesharing or increase participation by 20 percent and increase fleet miles per gallon by 10 percent through a driving efficiency program. Many companies responded to this call for voluntary conservation by beginning a commute alternatives-type of program.

Federal Price Controls and Allocation System

Between 1971 and 1981, gasoline was regulated by a complicated federal price control and allocation system. The Mandatory Petroleum Allocation Regulations distributed cuts of fuel supplies equally among distributors and retailers. Price controls kept prices from skyrocketing during a shortage. The allocation system allowed certain categories of fuel users, including passenger transportation services, to receive 100 percent of their base-period fuel use. President Reagan removed these allocation and price controls on petroleum products in January of 1981.

Priority Fuel Allocation for Transit and Vanpools

During 1979, the Mandatory Petroleum Allocation Regulations were amended to allow providers of public transit 100 percent of their current fuel needs on a priority basis and to extend this priority to vanpools (Special Rule No. 9). Thus, before the recent deregulation of gasoline, there was a federal system for ensuring fuel supplies for transit and vanpools.

The federal allocation regulations also gave authority to the states to establish a state fuel set-aside. During the 1979 shortage, 5 percent of gasoline supplies and 4 percent of diesel supplies in California were available for emergency and hardship cases by application to the state. State set aside guidelines gave vanpools and transit priority along with agricultural and emergency vehicles and trucking.

The existence of Special Rule No. 9 and the state set-aside made it possible for vanpools to receive priority fuel. Ridesharing agencies and employers made application to the Department of Energy for special allocations to be delivered to selected bulk purchase and distribution sites. Service stations agreed to set up special lanes and hours for vanpools. With deregulation of petroleum fuels, federal and state priorities for transit and vanpools no longer apply.

CURRENT GOVERNMENT CONTINGENCY PLANNING

Federal

The Reagan administration's approach is to depend on the increasing price of fuel to balance demand during an oil supply emergency. The only measures remaining from the 1980 Standby Federal Emergency Energy Conservation Plan are measures allowing gas stations to institute minimum purchase or odd-even purchase days requirements. The 1979 EECA requirements that the federal government develop a contingency plan that is adequate to meet shortages up to 20 percent and a rationing plan for shortages over 20 percent are still in effect, but will expire in 1983. In light of the Reagan administration's position to rely on price during an emergency, it is unlikely that EECA will be extended.

A Strategic Petroleum Reserve for stockpiling fuel to reduce national vulnerability to supply disruptions was established in 1975 and currently contains 260 million barrels of oil. Under the Reagan administration, supplies will continue to be added to this reserve but at a slower rate. When full, the reserve would supply 60-90 days of the nation's essential needs. While there is a separate reserve for military needs, the Strategic

Petroleum Reserve may also be used for military purposes.

The International Energy Agreement also is still in effect, but uncertainty remains concerning its successful implementation.

State

In California, the California Energy Commission is responsible for developing the state's energy emergency plan. Although the federal government is no longer enforcing this requirement, the state sees a need to prepare for the economic disruption and mobility impacts of a fuel shortage. The Commission is charged with this responsibility by the Warren-Alquist Act and is required to update the state emergency plan every five years. An initial plan was developed in 1976, and the first update is now nearing completion. The Energy Commission also is preparing an emergency information system for monitoring fuel supplies in California. In the event of an oil embargo or other supply disruption, this information will aid in projecting impacts. (Contact the Energy Commission to receive regular supply/demand reports — see Contacts list at the end of the chapter.)

In September 1980, the state Legislature passed a bill (SB 1390) that established statewide motor vehicle fuel conservation goals of a 5 percent reduction of the average amount used during July 1977-1980 and authorized the counties to adopt measures to achieve conservation goals and to prepare for emergencies. The California Energy Commission contracted with the Institute for Local Self Government to develop guidelines for local contingency plans and to assist counties and other interested participants with developing plans. These local plans will be incorporated into the state plan.

Legislation was proposed during the 1981-82 session to establish a state fuel set-aside program independent of federal regulations, but the bill (AB 954, Thurman) did not pass.

Finally, the governor is assigned broad emergency powers under the California Emergency Services Act and can use these powers in activating the state emergency plan. It was under this authority that the governor established the retail gasoline sales restrictions of 1979 (odd-even purchase plan).

Local Governments

In the MTC region, Solano, Sonoma and Santa Clara Counties have begun developing local contingency plans. Santa Cruz County (not in the MTC region) is also beginning a plan. Other counties in the state have drafted plans. The Contacts section includes a list of county contacts and a California Energy Commission contact for further information on local energy contingency plans.

BAY AREA TRANSIT CONTINGENCY PLANNING

The Regional Transit Association, an organization of the several transit operators in the region, began working on energy contingency plans during the 1979 shortage. Strategies identified by the transit planners are:

- promotion of flexible working hours to spread out peak-hour demand;
- providing increased information to the public;
- keeping and maintaining old buses when new ones are purchased;
- negotiating union contracts which allow for part-time operators;
- adding some fuel storage capacity and investigating the possibility of joint fuel-purchase contracts;

- improving coordination between services;
- inventorying available charter services to supplement regular service;
- determining how to serve the highest priority trips in the most efficient manner.

It is important to note that only small increases in transit capacity are possible during a gasoline shortage because of limitations on available vehicles, drivers and funding. In the event that transit operators cannot obtain fuel supplies, services would need to be cut back. For these reasons, emergency transit plans call for promoting ridesharing and developing employer-sponsored transit services.

BAY AREA RIDESHARING CONTINGENCY PLANNING

RIDES for Bay Area Commuters, Inc.

RIDES, the regional ridesharing organization, has prepared a contingency plan. This plan calls for:

- advance preparation of an emergency information kit for employers, including posters, flyers, and application forms and suggested employer/employee actions; RIDES will begin distributing the package to large employers as soon as it is ready;
- advance preparation of radio and TV announcements and newspaper ads about RIDES' services;
- increased matching through increased phone capacity, temporarily increased staff and extended office hours;
- mailing new match lists to "emergency only" applicants already on file and mailing monthly match list updates to all applicants for the duration of the crisis;
- increased assistance to potential vanpoolers in establishing owner-operated vans;
- advocating priority fuel for vanpools and carpools and negotiating with service station owners for preferential pumps and 24-hour service.

RIDES includes a box on its application form that can be checked by persons who are interested in ridesharing only in an emergency. These people will appear on match lists with an indication that they are "emergency only" riders. They will also receive a match list when they apply and will automatically receive a new one in an emergency.

Santa Clara County Ridesharing Program

In Santa Clara County, County Transit, RIDES and the Santa Clara County Manufacturing Group have established a joint ridesharing program. Part of the program calls for rapid expansion of ridesharing in an emergency. Suggested elements of such an emergency program are: an emergency ride-matching database that can be quickly expanded; a park-and-ride lot inventory; development of a system of carpool registration to be used for priority fuel allocations; and preparation of special marketing materials.

MTC'S ROLE IN CONTINGENCY PLANNING

MTC is willing to assist with the coordination of contingency plans if called upon to do so by county contingency planners. MTC will also provide employers with information on government actions which may affect their contingency plans and disseminate information on company programs through the *Coordinator Connection* newsletter and manual updates.

THE EMPLOYER ROLE IN AREAWIDE CONTINGENCY PLANNING

No set of fuel conservation or contingency strategies will work without voluntary compliance. It is important for the private sector to work with government agencies in the planning stages to develop measures with which they are willing to comply. In the Bay Area, where few government agencies are currently placing a high priority on contingency planning, it is perhaps appropriate for business and industry to take a lead in preparing for the serious impacts of a petroleum shortage.

Actions that a company may take to become involved in areawide contingency planning are summarized on Table 26.

TABLE 26

AREAWIDE PLANNING ACTIONS

- **Contact the county contingency planner**, MTC or the California Energy Commission for information on current contingency planning activities.
- **Offer to participate** on planning committees, review plans or assist in developing an employer section of the contingency plan.
- **Encourage top management** to help motivate managers of other companies, perhaps through employer organizations such as the Bay Area Council, manufacturing groups or chambers of commerce.
- **Offer to share** the company's in-house plan with government planners and other employers.
- **If there is no local government contingency plan**, either encourage local government officials to make contingency planning a top priority or work through employer associations to develop and propose a viable local plan.

COMPANY CONTINGENCY PLANNING

FUEL SUPPLY CONTINGENCY PLAN

The purpose of a company fuel supply contingency plan is to conserve fuel when supplies have been cut either by a government-imposed allocation system or by the company's inability to buy fuel on the open market. The plan could also be implemented if the government were to mandate fuel conservation targets in order to reduce vulnerability to foreign control of oil supplies. A fuel supply plan might also include strategies for stockpiling fuel in preparation for future shortages. A good fuel supply contingency plan will also look at the effects of fuel conservation strategies on productivity and employment. Eliminating fuel-oriented functions will mean reduced workloads. Decisions could be made in advance about whether employees involved in such tasks should be transferred to other duties or furloughed for the duration of the shortage.

Table 27 summarizes elements to consider in a company fuel supply contingency plan.

Table 27

FUEL SUPPLY CONTINGENCY PLANS

- **Promote transit or bicycles** — require employees to use public transit for work trips whenever possible; provide special shuttles to frequent destinations; provide bicycles for business trips and in-plant transportation.
- **Eliminate unnecessary trips** — use the telephone and other telecommunications devices; employ a delivery service or use mail service more; curtail special projects requiring travel; hold supervisors accountable for reduced fuel use targets; require special approval of trips.
- **Plan travel necessary for operations** — plan schedules and routes more carefully; decrease field personnel check-in requirements; arrange ridesharing for business trips.
- **Set priorities for gasoline-oriented operations and services** — decide which will be eliminated first when fuel supplies are cut.
- **Increase the fuel efficiency of company vehicles** — require adherence to the speed limit; improve maintenance and tune-up frequency; train employees in fuel-efficient driving techniques; replace fleet with more fuel efficient vehicles or convert to alternative fuels.
- **Prevent fuel pilfering** — fit vehicles with locking gas caps.
- **Monitor fuel supplies** — monitor California Energy Commission reports of fuel supply and demand (see References); establish policies about use of on-site fuel supplies.
- **Stockpile fuel** — buy or lease additional storage containers.
- **Investigate nontransportation fuel-use measures** — lower thermostats; purchase more fuel-efficient machinery; convert to alternative fuels, etc.

EMPLOYEE COMMUTE PLANNING

The following description of an employee commute contingency plan for a fuel shortage assumes that the company has a transportation coordinator and has established a commute alternatives program. A fuel shortage and accompanying sharp increase in gasoline prices will cause a sudden and heavy demand for alternative ways to get to work. The coordinator's job will shift from convincing people to change to responding to needs with immediate solutions.

The following are some suggested actions:

Increased Information

The coordinator should increase his/her supply of transit and ridesharing information. Arrangements might be made with transit agencies to receive information on changes in routes and schedules. Distributing information on the operating hours of nearby gas stations will help prevent employees needing to drive around in search of fuel.

Alternative Hours

Alternative work hours, if not already adopted by the company, will alleviate problems in an emergency. Temporary flexible hours can be put into effect quickly and simply by allowing employees to start work any time during a specified period, work the full day and then leave. This eliminates problems of tardiness, allows people to make special arrangements to carpool or take transit, and allows for gassing of cars on nonwork time. Large companies might also work with transit districts, nearby companies and schools to stagger hours so that the transit system can serve more people. Companies in an industrial park, for example, could investigate these possibilities during the contingency planning process. A four-day work week (10 hours a day) on a temporary basis would enable employees to commute outside the peak hours and save one day of travel. In more severe emergencies, certain classes of employees might be able to work at home.

Transit

During a fuel shortage, more people will be interested in traveling to work by transit. The coordinator should obtain additional public transit tickets for sale and should investigate the possibility of providing a temporary shuttle to the nearest transit terminal. This might be accomplished using a fleet vehicle, rented van or contract service. (See the Shuttle section in the Transit Chapter.) During an emergency, the company might want to provide its own transit system for employees. Temporary transit routes can be set up to park-and-ride lots or areas where employees live. This would be similar to a transit shuttle arrangement with the company operating the vehicles and charging a daily fare. The contingency planner should identify residential clusters and look into the possibility of using school buses, charter services, RIDES' vans or company vehicles.

Jitneys (private vehicles operated for hire) and shared-ride taxi services are additional methods of transportation from transit terminals, park-and-ride lots or employee homes. Local jurisdictions often have ordinances against these services. Employers, working together and with public contingency planners, can propose lifting these restrictions in emergencies. The coordinator can then identify areas where these services would be useful, encourage private individuals to operate jitneys, and make arrangements with taxi companies to serve the identified market.

Carpools and Vanpools

Carpools are more likely to form during an emergency than vanpools because the vehicles are readily available. Regular ridesharing campaigns should encourage applications from those wishing to carpool only in an emergency. RIDES applications and match lists have a means of identifying these emergency-only ridesharers.

During a fuel shortage, RIDES and the other ridesharing agencies will be very busy and phone lines may become loaded. Coordinators can help by distributing and collecting applications, delivering them to the ridesharing agency, distributing match lists, and assisting with carpool formation.

In-house carpool programs should also prepare for increased activity. The contingency planner should estimate the additional staff time necessary to match employees quickly with other prospective carpoolers. It may be possible to obtain volunteer assistance or shift responsibilities of other employees and to train these persons ahead of time.

There are two types of carpooling programs which employers have found especially useful in emergencies. One is a system for matching all employees by zip code or other residence zone. This is the approach employed by Lockheed during the '73-'74 crisis using an in-house computer (see Examples of Company Plans). With a program such as Lockheed's, matching can be done very quickly in the event of a crisis. Santa Clara County has a system for geocoding company employee residence data to the nearest cross street and can provide a match list to each employee. This program is being tested at ROLM Corporation and will be available to other companies in the county.

Another type of emergency carpool system is the employee self-matching system used by General Electric in San Jose (see Examples of Company Plans). If not actively marketed, this type of system will usually not be used much in normal circumstances. But in a fuel shortage, the system will be in place for people who want a temporary alternative.

The contingency planner could also develop a standby program to use company vehicles for home-to-work transportation. The State Department of Transportation has a "fleetpool" program in place. Cars are used for state business during the day. Carpool groups pay a fee to use the vehicles for commuting. (See the Contacts list at the end of the chapter for the name of a person to contact).

Vanpools will be difficult to organize quickly in an emergency, and van availability will be limited. The coordinator can assist by finding space in existing vanpools for temporary riders and can encourage and assist employees who own vans to operate temporary vanpools. (Recreational vehicles can also sometimes be used for this purpose.) The contingency planner can also investigate terms for leasing vans from private leasing companies on a temporary basis if there is much likelihood of vanpool groups forming.

Bicycles

Bicycle commuting will become more attractive relative to automobile travel during a gasoline shortage. The coordinator can identify space for temporary secure bike parking or propose a policy allowing emergency bike parking in offices. Bicycle route maps and bike/transit information could also be published or posted, and meetings can be organized for veteran cyclists to assist new cycle commuters in getting started.

Support Measures

Companies can assist those who would normally need their car during the day but who would use an alternative transportation mode during a gasoline shortage. One measure would be to provide shuttle vans or buses to frequent lunchtime destinations such as commercial areas, recreation facilities, restaurants and banks, or other

company sites. These could be the same vehicles that are used for access to a transit terminal or park-and-ride lot. Company vehicles could be made more available for business uses if company fuel supplies permit. The company could also institute a temporary policy to provide cab fare or a ride home for ridesharing employees if family emergencies arise. Services such as automatic bank deposits or on-site check cashing may help. In severe or long-lasting shortages the company may need to consider programs such as on-site day care or temporary overnight accommodations.

Fuel

During a shortage, it is possible that the federal government would implement an emergency fuel allocation system similar to the one that was discontinued in 1981. The coordinator should monitor such regulations and support priority fuel allocations for ridesharers. If such a program is implemented, arrangements can be made to purchase fuel allocations for vanpools and shuttles and distribute the fuel from company pumps. Carpool allocation programs are more difficult to administer. One of the problems is the difficulty in registering legitimate carpools.

Developing a Plan

Once it has been decided that your organization should have an energy contingency plan and the basic scope of the plan has been determined, there are several steps to take to prepare the plan. These are summarized on Table 28.

TABLE 28

STEPS IN COMPANY CONTINGENCY PLANNING

- **Involve other relevant staff** in planning (e.g., fleet manager, fuel purchaser, transportation committee).
- **Gather data** on current company fuel use and employee commute patterns.
- **Describe possible fuel shortage scenarios.** Stages of the crisis can either be described as 10, 20 and 30 percent fuel shortages or in terms of other indicators, such as gas lines or requests for commute assistance.
- **Analyze the potential impact** of each scenario on company operations and the employee commute.
- **Identify possible strategies.** Analyze the potential for fuel use reduction, costs, lead time for implementing and management implications.
- **Select strategies** to respond to each stage of an escalating crisis.
- **Detail the chosen strategies.** Identify responsibilities, additional staffing and budget needs, advance preparations, and any cooperation that is necessary from other agencies or organizations.
- **Get management approval** of the plan with special attention to any policies, standby procedures or restrictions that need to be implemented as well as budget needs.
- **Make whatever advance preparations** are possible, including educating others who will be involved in implementing the plan.
- **Keep the plan updated** and well-documented so that it may be implemented by others.
- **In an emergency,** implement the plan, monitor its success, modify if necessary, and document the experience for future emergencies.

CONSIDERATIONS FOR OTHER EMERGENCIES

Transit Strikes

The possibility of transit strikes are usually known several weeks in advance. The number of employees affected will vary considerably in different parts of the region, and the impact on the company will be related to the extent of employee transit use. The transportation coordinator should make an effort to identify the extent of employee transit dependence.

In central urban areas with heavy use of transit and limited parking availability, a transit strike will be a serious disruption. The coordinator should prepare ahead by distributing ridesharing information and applications and information on park-and-ride lot locations. Another strategy might be to run a temporary shuttle to an existing or newly created park-and-ride lot. Temporary flexible hours will help people make carpooling arrangements. In a suburban area where there is a small percentage of people using transit, the coordinator's response might be limited to an offer of personal assistance in finding an alternative for transit users who cannot drive.

Parts of the employee fuel-use contingency plan, such as rideshare matching boards or matching from personnel files, will be useful during a transit strike. The RIDES "emergency only" matching capability will also aid transit riders in the event of a strike.

Localized Traffic Disruptions

Examples of these geographically localized disruptions are:

- a major bridge or tunnel closure;
- a major freeway closure or capacity reduction;
- a commuter rail or rapid transit closure.

These disruptions can be unforeseen and short (e.g., a toxic chemical spill on a freeway); unpredictable and of longer duration (e.g., the BART tube fire and closing); or predictable and of very long duration (e.g., rebuilding a bridge). Public agencies will probably act immediately to provide temporary alternative transportation or routing.

Employers need be concerned only by the longer disruptions. If a commute alternatives program has been implemented, existing information will allow the company's transportation coordinator to determine how many employees come from the affected area and whether they have alternatives. Providing information on normal or special alternatives and establishing flexible work hours will probably be an adequate response. If a large number of employees are affected, the company may wish to provide a special temporary alternative such as a chartered bus or a work-at-home program.

Air Pollution Alerts

The Bay Area has not had pollution episodes that require special transportation responses or the curtailment of activities, but the possibility always exists. Responses would be similar to the strategies developed for an energy contingency plan.

Personal Transportation Emergencies

Personal emergencies of the "my car won't run" type can be mitigated by an "emergency only" ride-matching system such as RIDES offers or a company program which supplies everyone with a periodic match list. The regular commute alternatives program should market the idea of carpooling, transit or bicycling as an occasional alternative for these types of situations.

CONCLUSIONS

The possibility of various types of emergencies argue for having a highly visible commute alternatives program and a flexible plan for increased efforts or special responses to emergencies. The transportation coordinator should also maintain an awareness of situations which are likely to affect his/her program (by reading newspapers, listening to radio news, receiving newsletters from the California Energy Commission, RIDES and MTC, and staying in touch with local contingency planners). The coordinator should also keep the emergency response plan up-to-date and usable.

REFERENCES

Contingency Plans

- *EIA Publications Directory*, U.S. Department of Energy, Energy Information Administration (Semiannual updates are available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402).

(For questions on energy statistics or information on availability of other Energy Information Administration publications contact National Energy Information Center, E1-20, Forrestal Building, U.S. Department of Energy, Washington, D.C. 20585, 202-252-8800).

- *Energy Watch, The Quarterly Oil Report, Annual Energy Production and Consumption* (Monthly, quarterly and annual energy supply and demand reports.)
- *Guidelines for Local Contingency Plans for Energy Shortages*, March 30, 1981, by the Institute for Local Self Government in Conjunction with the California Energy Commission.
- *Moving Toward Security: Strategies for Reducing California's Vulnerability to Energy Shortages*, November, 1981 (draft), by the California Energy Commission.

(These and a complete list of CEC publications are available from the California Energy Commission, Publications Unit, 1111 Howe Avenue, Mail Station 50, Sacramento, CA 95825, 916-920-6216).

CONTACTS

Information on state or federal contingency plans or fuel supply information during an emergency

- California Energy Commission
B.B. Blevins
Transportation Office, Conservation Department
Mail Stop 64
California Energy Commission
1111 Howe Ave.
Sacramento, CA 95825
(916) 920-6106

Local Government Contingency Plans

- California Energy Commission
B.B. Blevins or Bill Tippetts
Transportation Office, Conservation Department
Mail Stop 64
California Energy Commission
1111 Howe Ave.
Sacramento, CA 95825
(916) 920-6106
- Alameda County
M.C. Hunt, Office of Emergency Services
(415) 577-1332

- Contra Costa County
Bart Gilbert, Administrative Office
(415) 372-2105
- Marin County
John Barrows
(415) 499-6358
- Napa County
Till Noeggerath, Public Works Department
(707) 253-4351
- San Francisco
Robin Calhoun, Public Utilities Commisison
(415) 921-2704
- San Mateo County
Len Beyea, Planning Division
(415) 363-4161
- Santa Clara County
George Antoine, General Services Administration
(408) 299-3242
- Santa Cruz
Bill Plageman, Administrative Office
(408) 425-2115
- Solano County
John Gray
(707) 429-6407
- Sonoma County
Pete Peterka, Emergency Planner
(707) 526-2361

Regional Contingency Planning

- Metropolitan Transportation Commission
Susan Bachman
(415) 849-3223
(also for information on transit contingency plans).

Ridesharing Contingency Plans

- RIDES for Bay Area Commuters, Inc.
Frank Harris, Director of Operations
(415) 861-POOL
- Santa Clara County Transit District
Jim Lightbody, Senior Transit Engineer
(408) 299-4901

Company Contingency Plans

- General Electric Co., San Jose
Burt Epstein
Mail Code #402
175 Curtner Avenue
San Jose, CA 95125
(408) 925-1649

- Lockheed Missiles and Space Co., Inc.
C.J. (Cec) Pennington
Manager, Traffic and Distribution
1111 Lockheed Way
Sunnyvale, CA 94086
(408) 743-2603
- ROLM Corporation
Charlene Rottler, Transportation Coordinator
4900 Old Ironsides Drive
Santa Clara, CA 95050
(408) 988-2900, ext. 5241

Fleetpool Program

- State of California Transportation Department, Caltrans
Larry Beistegui
(415) 557-1986

APPENDIX

- Details on General Electric's Carpool Matching Board

CARPOOLING - THE INTERESTED EMPLOYEE TAKES THE INITIATIVE

When most employers think of setting up a carpool program, they anticipate employee surveys, data processing, matching lists, distribution of information, and a fair amount of ongoing administrative support. Is there a less sophisticated alternative which your company could implement?

Yes there is . . . one which has been developed by General Electric Company's Nuclear Energy Business Group for use at its Santa Clara County facilities. It places the responsibility for finding fellow carpoolers directly on each interested employee.

At relatively low cost, with minimal effort to implement and maintain, your company could adopt or adapt this technique. The concept is not original with General Electric; the specific device and forms are not proprietary. You are invited to contact the undersigned for additional information.

WHAT MATERIALS ARE REQUIRED?

- Map - covering territory in which the bulk of employees reside (10-15 mile radius)
- File box
- Tabbed dividers
- Data forms

HOW DOES IT WORK?

- Employee takes initiative
- Home coordinate identification
- Complete and file form(s) - (privacy protection; special considerations)
- Look up potential carpoolers
- Two or more proximate facilities
- Periodically monitor the file - (remove "old" forms; replenish supply of blank forms)

WHAT ARE THE ADVANTAGES?

- Ease of implementation - no surveys, mailings or mechanization; relatively low cost
- Minimal administration
- Places responsibility for initiation and followup on each employee
- Enables relatively quick formation of carpools as a function of employee interest
- Accommodates employees who work at separate but relatively proximate facilities

IS IT SUITABLE FOR ANY COMPANY?

- Company of any size can use, but if fewer than 500 employees work close enough to be potential carpoolers, this approach may not be warranted.
- Outreach capability - potential for joint venture with other nearby companies.

FOR ADDITIONAL INFORMATION CONTACT: Burt Epstein
Program Manager - Support Programs
General Electric Company - M/C 402
175 Curtner Avenue
San Jose, CA 95125
(408) 925-1649

ADDITIONAL INFORMATION FOR PROCUREMENT OF PURCHASED COMPONENTS
AND/OR SERVICES FOR GENERAL ELECTRIC'S CARPOOL SYSTEM

<u>COMPONENTS AND/OR SERVICES</u>	<u>SUPPLIER</u>
● Map of Santa Clara County (Specify "rolled" or "flat" to avoid creases)	Regal Map Company 63 Keyes Avenue San Jose, CA 95112 297-1619
● Construction, all silk screening (decals included) and final assembly.	Display Rite, Inc. 272 San Jose Avenue San Jose, CA 95125 John Chuck 297-1017
● Large reverse photoprint (white lines and letters on black back- ground) of map grid; paste up of map grid, map and "Community Locations Chart" to art board	Adamson & Walton 229 Polaris - No. 2 Mountain View, CA 94040 Gary Walton/Pete Adamson 961-0777
● Map grid art and "Community Locations Chart"	Produced/provided in-house by General Electric Nuclear Energy Business Group
● Carpool Data and Incentive Program Entry forms - artwork and printing	
● Tabbed index cards for file boxes - artwork, printing and cutting	

FOR ADDITIONAL INFORMATION, AND
CARPOOL SYSTEM PLANS, CONTACT:

Burt Epstein
Program Manager - Support Programs
General Electric Company - M/C 402
175 Curtner Avenue
San Jose, CA 95125
(408) 925-1649

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